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BILATERAL POLYCYSTIC OVARIES (Large White Ovaries)*

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AND

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In 1935 Stein and Leventhal¹ called attention to a specific syndrome characterized primarily by amenorrhea and sterility which was associated with definite ovarian pathological changes. Correction of the syndrome was effected in a large percentage of their cases by bilateral wedge resection of the gonads. Their presentation introduced a new concept in gynecology.

The entity of bilateral polycystic ovaries is based chiefly on a syndrome comprising menstrual vagary. Amenorrhea and sterility are the outstanding features of the syndrome. Less frequently observed are hirsutism, headaches, obesity and hypodevelopment of the breasts.

Recognition and acceptance of polycystic ovaries as a disease entity has been delayed. Perhaps this delay is occasioned by the small amount of literature on the subject as well as a failure, to date, to offer satisfactory explanation of the etiological factor or factors.

In 1944 Stein² presented a paper on the "Significance in Sterility of Bilateral Polycystic Ovaries." This presentation represented his third five-year report on the subject. It is Stein's² belief that the syndrome results from a definite endocrine disturbance and is not congenital, inflammatory, nor degenerative. The pathological counterpart of the ovarian disturbance consists of bilaterally, symmetrically enlarged, pearly white gonads with marked condensation of the tunica. More adequate description of the gonads will be given under the gross pathological findings.

Symptoms

I. Amenorrhea may be either primary or secondary in type. One patient may suffer amenorrhea shortly after the onset of her periods. Another may become amenorrheic after she has had normal cycles throughout adolescent years and on into early maturity. Cycles of hypermenorrhea may herald the forthcoming amenorrhea. Amenorrhea tends to be progressive in

nature, but may be occasionally interspersed with a normal cycle.

Amenorrhea may occur late in the life of the sexually mature woman after her cycles have been perfectly normal for years and even after she has borne children.

II. Sterility follows closely the occurrence of amenorrhea. The amenorrheic patient obviously has not ovulated. Endometrial biopsy within the first few hours of menses almost invariably reveals a non-secretory endometrium. Basal temperature records indicate that ovulation has not occurred.

III. Hirsutism, in the form of masculine distribution of hair, is at wide variance not only in incidence but in distribution and extent. The face may be covered by a beard so heavy as to require frequent shaving. A male type of escutcheon and heavy coarse hair on the forearms, legs, thighs, buttocks and pubic region are often associated. The areola of the nipples may be ringed with heavy coarse hair. Hirsutism occurred in approximately fifty per cent of our cases. This parallels the percentage reported by Stein² in his much larger series.

IV. Headaches, usually frontal in location, and of varying degree of severity was a symptom in about fifty per cent of our cases. This symptom was not included in the syndrome by Stein.² The headaches are most severe on awakening in the morning and are almost invariably worse at the time the patient should normally menstruate. Nausea is frequently associated.

V. Obesity, reported by Stein² as a less frequent finding in bilateral polycystic ovaries, occurred in only three of our eighteen proven cases.

VI. Hypodevelopment of the breasts. None of the cases here considered showed abnormal breast development.

Diagnosis

As will be shown in tabulated form only nine of the cases in this series were diagnosed preoperatively.

*Read before Annual Session, S. C. M. A., May 1950.

Two additional cases were suspected. The eight remaining cases were operated for other reasons viz. suspected masculinizing tumor of the ovary—1 case; appendectomy—2 cases; ovarian cyst—4 cases; uterine fibromyoma and pelvic endometriosis—1 case. Of these eight cases bilateral polycystic ovaries was found in three cases as an additional finding. In five cases it was the sole finding.

A history of menstrual vagary — particularly amenorrhea — sterility and recurring frontal headaches plus the finding of hirsutism support a clinical presumptive diagnosis of bilateral polycystic ovaries. The additional finding, on pelvic examination, of bilateral symmetrically enlarged ovaries further suggests the diagnosis. Utilization of basal temperature records and endometrial biopsy lend further support. Stein²

routinely uses pneumoperitoneum and utero-salpingography to corroborate his findings. We have not found it necessary to carry out the study routinely. Basal metabolism and sugar tolerance tests are within normal limits. Roentgenographic study of the pituitary is normal.

If the functional disturbance of the ovaries occurs early in the reproductive life of an individual, uterine hypoplasia is usually observed. If the cyclic disturbance comes later in life, the uterus is usually found to be normally developed. Prolonged amenorrhea may alter the finding—the uterus being small and atrophic.

Recto-abdominal examination of the pelvic organs in unmarried girls may be unsatisfactory. Tenseness and obesity may preclude satisfactory pelvic evaluation.

Suspected cases, where sterility is of concern and cases in which the pelvic findings are not satisfactory

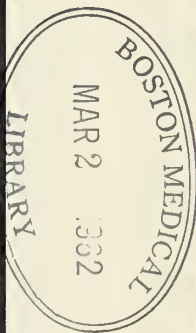


FIGURE 1

Note heavy hirsutism of upper and lower extremities and masculine distribution of pubic hair.

should, we believe, be studied by trans-uterine pneumoperitoneum. This study clarifies the status of tubal patency and at the same time affords study of the comparative size of the ovaries and uterus. Culdo-scope examination has not been used by us but certainly should be useful in questionable cases.

Pathology

Macroscopic Appearance—The ovaries enlarged two to four times are globular, tense and pearly white. The convolutions seen in the normal ovary are absent. The tunica is glistening and thickened. Frequently observed are small vessels coursing through the capsule. Multiple small but variable sized cysts may be seen shining through the tunica. Developing or receding corpora lutea are not present. The capsule is remarkably resistant to the knife. The cut surface shows numerous cysts lined up beneath the capsule. The ovarian stroma as well as the capsule is resistant to the knife. Bleeding from the incised polycystic ovary is minimal and suture without tearing is easy.

Microscopic Appearance—There is extreme thickness of the tunica albuginea consisting of collagenous connective tissue condensation. The multiple small cysts lined beneath the condensed capsule are frequently filled with precipitated albuminous material. The cysts are lined by cellular remnants of granulosa and theca cell layers which at some points are rather well defined and at other points almost completely degenerated.

The cysts represent degenerating graafian follicles from which an ovum was never discharged. Deeper in the dense stroma of the ovary are graafian follicles in various stages of development. They are for the



FIGURE 2

Note bilaterally enlarged, smooth, globular gonads which are approximately two-thirds the size of uterus.



FIGURE 3

Symmetrically enlarged, globular, tense gonads, the right showing well formed corpus luteum (see text). Note vessels coursing through the ovarian tunica.

most part immature in type.

Corpora albicans are conspicuously absent indicating minimized corpus luteum formation.

Microscopically some of the patients show luteinization of the theca interna in the unruptured follicles. This picture, first described by Robinson³ in 1935 in association with metrorrhagia, is called to our attention by Ingersoll and McDermott⁴ in a recent paper on Bilateral Polycystic Ovaries. These authors have found no clinical pathological correlation between luteinization of the theca interna and patients with hypermenorrhea. They advance the question as to whether or not the active cells of the theca interna put out progesterone in the absence of ovulation and plan to study pregnandiol excretion in their future cases.

Etiology

Normal cyclical function of the ovaries is produced by a reciprocal reaction between the pituitary and ovarian hormones. Ripening of the follicle, ovulation, and corpus luteum formation are the orderly results of the pituitary gonadotropins. When ovulation does not occur, the inhibiting influence of the corpus luteum on the pituitary is absent and the follicle stimulating hormone from the anterior pituitary may run amuck. Large numbers of various sized cysts beneath the ovarian tunica may result from such uninhibited stimulation of immature follicles. Whether this is what occurs or whether there is actual hypersecretion of the anterior pituitary is not known. The follicles, unable to rupture through the thickened tunica, may rupture into other follicles and explain the presence of the various sized cysts seen in bilateral polycystic ovaries.

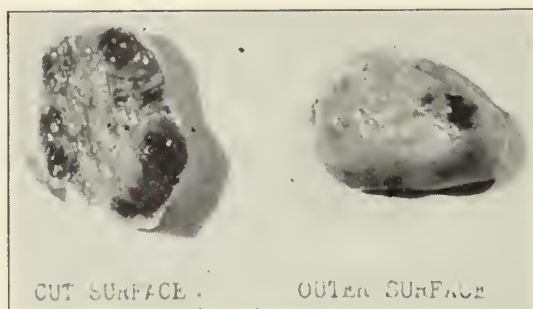


FIGURE 4

Note extremely thickened tunica albuginea with numerous variable sized cysts lying beneath on cut surface.

An interesting experiment relating to etiology of this syndrome was conducted by Weed & Collins⁵ of Tulane University. This experiment, reported in 1947, deals with the "Effect of Prolapse of Ovaries on Cystic Degeneration and Ovulation." Ovaries of adult female rabbits were displaced from their normal position by suture of the ovary to the anterolateral abdominal wall. Special care was taken to avoid damage to or ligation of the major ovarian vessels and fallopian tubes. Brood and virgin does were isolated in single cages for two to three months after which active bucks were introduced into the various cages and left for two weeks. Re-examination of the ovaries after this period revealed no fresh corpora lutea in seven of the eight does. In one doe, there was evidence of intra-uterine pregnancy and true corpus luteum formation. The ovaries of the unpregnant does were found to contain small follicles in limited numbers. The question as to whether the vessel changes played a role is suggested but the answer is not established. The authors believe that polycystic disease of the ovaries is produced by follicular atresia resulting from persistent vascular congestion. The follicles in which the ova are dead continue to secrete liquor folliculi under stimulation of the pituitary. Compression of the tunica albuginea results in further impairment of circulation in the smaller vessels leading to vascular congestion, interstitial edema and increase in size and weight of the ovary. Vascular congestion further increases and a vicious cycle is established.

Treatment

Treatment of bilateral polycystic ovaries should be designed toward disruption of this vicious cycle. Cure is generally accomplished surgically by bilateral wedge resection of the ovaries. Approximately one-half of the ovarian substance is removed in a pole-to-pole wedge resection made opposite the hilus. Cysts not included in the resected portion are ruptured with the knife point from within the ovarian incision after which the raw surfaces are re-approximated. The ovarian incision is closed with a double row suture, one deep the other superficial, of number 00 plain catgut on a fine, curved, non-cutting needle. This partial resection relieves increased tension within the ovary. The circulatory status of this organ is thereby

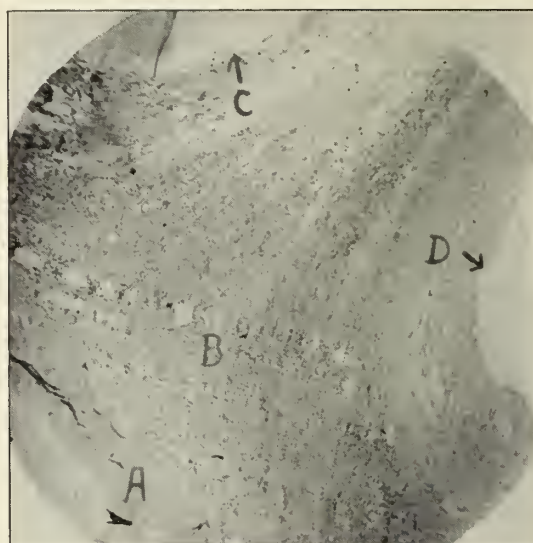


FIGURE 5

Note collagenous thickening of tunic a(A), fibrosis and atrophy of ovarian stroma (B), compression atrophy of cells lining graafian follicles (C & D).

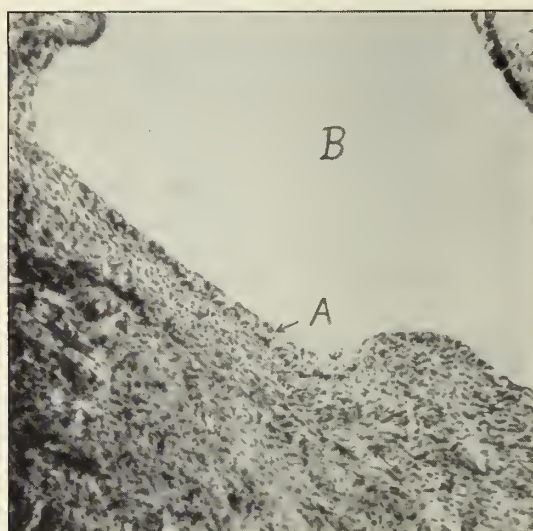


FIGURE 6

Note atrophy and vacuolization of cells (A) lining cystic graafian follicle (B).

improved and return to normal function results.

There is some controversy over the proper handling of cases of bilateral polycystic ovaries.

In opposition to surgical correction are advocates of hormone or x-ray therapy. Good results from utilization of these agents in cases of amenorrhea have been reported by Rubin,⁶ Kaplan⁷ and others. Stein² believes these results were obtained in patients in whom ovarian changes had not reached the stage of cystosis. He further states that "None of these authors has demonstrated either by gynecography, surgery or

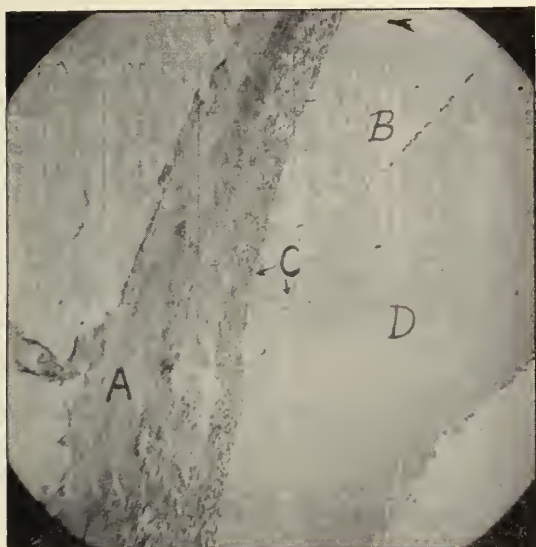


FIGURE 7

Note extreme condensation of tunica (A) with the large cystic graafian follicle beneath (B). Note atrophy of cells lining follicular wall (C) and precipitated albuminous material within follicle (D).

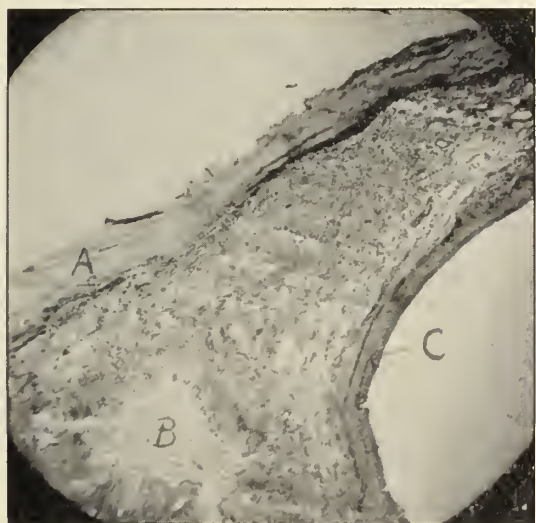


FIGURE 8

Observe extreme condensation of tunica (A). There is an early corpora albicans (B). Note fairly well-preserved cellular elements of wall of cystic graafian follicle (C).

otherwise that the patients whom they successfully treated with hormone or x-ray therapy had bilateral polycystic ovaries."

Gilbert F. Douglas⁶ (Medical College of Alabama) in his recent review on "Sterility as Related to Benign Lesions of the Uterus and Ovary" states: "The polycystic ovary is a disease entity. If such ovaries are treated conservatively by removing the affected parts either by wedge resection or enucleation, recurrence may never take place and the remaining ovarian tissue probably will function normally."

Tabulated below is data pertinent to eighteen pathologically proven cases and one suspected case of bilateral polycystic ovaries. The suspected case (#8) had total amenorrhea for ten months prior to consulting a physician. Periods of amenorrhea had preceded her total amenorrhea for several years. She showed marked hirsutism and pelvic examination revealed bilateral symmetrically enlarged ovaries. Gynecography corroborated the bimanual examinations but the patient elected not to have surgery done.

Summary and Conclusions

(1) Eighteen proven cases and one suspected case of bilateral polycystic ovaries have been presented. These cases have been collected during the past four years indicating that the condition though not common is certainly not rare.

A preoperative diagnosis of the syndrome was made in nine of the cases. Two additional cases were suspected. Our first encounter with the syndrome was in a patient of Dr. Gerald W. Scurry who was explored because of a suspected masculinizing tumor of the ovary. The ovaries were greatly enlarged and distinctly abnormal in appearance. The adrenals were explored and found to be normal. B. M. R. and x-ray of the sella turcica were normal. Bilateral wedge resection of the gonads was done in an effort to locate a masculinizing tumor. Prior to this time we were not aware of the syndrome reported by Stein.²

Of the remaining undiagnosed cases two were operated for appendicitis, four for ovarian cyst, and one case was explored because of sterility and uterine fibromyoma. Of these cases polycystic ovaries was the only pathology in five cases. Three cases were complicated by other pathology.

Thirteen of the cases were married. Six were single.

(2) Sterility was an expressed concern in nine of the cases. Three of these cases subsequently conceived and delivered normal babies. This result falls far short of Stein's² excellent results. Sixty-four point five percent (64.5%) of his cases became pregnant. Sufficient time has not elapsed since surgery to draw conclusions regarding correction of sterility but all cases are being followed.

(3) Hormone therapy had been extensively used in nine of the cases without benefit.

(4) Since hirsutism in bilateral polycystic ovaries is at best only halted in its progress by surgery upon the gonads, we believe that early investigation of its etiology is very important. Once hirsutism becomes a fixed pattern it persists.

(5) In two of the eighteen proven cases (case 2 & 3) we admit partial failure in correction of the syndrome. Case two persisted with abnormally long menstrual intervals for approximately a year following surgery. Since then, however, her menstrual interval has been between 32-35 days. Headaches which were severe preoperatively have not returned. Case

	Case							
	HC 1	CS 2	JK 3	KC 4	MFR 5	LET 6	MH 7	GB 8°
Age of Patient	22	32	18	26	17	27	32	31
Marital Status	S	S	S	M	M	M	M	M
Onset of Menses	14	11	14	13	14	14	13	9
Age Onset Amenorrhea	15	15	17	16	15	24	17	21
Pre Op. Hormone Therapy	Yes	No	No	No	No	Yes	Yes	No
Pelvic Pain	No	No	Yes	Yes	Yes	Yes	Yes	No
Headache	Severe	Severe	No	Severe	No	Severe	Mod.	No
Diagnosed Pre Operatively	No	Yes	No	No	?	Yes	No	?

° Suspected

° Not operated

		Case							
		HC 1	CS 2	JK 3	KC 4	MFR 5	LET 6	MH 7	GB 8
Cycle in Days	Pre Op Post Op	°180-750 26-30	180-730 28-70	60-90 28	90-180 28-30	90-150 30	90-120 28	60-150 28	180-450 °°
Duration of Flow in Days	Pre Op Post Op	7 5	1½ 3-4	14-21 4	5-8 6	5 4	7 5-6	5-30 5	2-3 °°
Character of Flow	Pre Op Post Op	Scant Mod.	Scant Scant	Scant to Hvy. Mod.	Scant to Hvy. Mod.	Scant Mod.	Scant to Hvy. Mod.	Scant Mod.	Scant °°
Endometrial Biopsy		Non- Secre- tory	Non- Secre- tory	Non- Secre- tory	Not Done	Non- Secre- tory	Non- Secre- tory	Not Done	Not Done
Hirsutism		Marked	Marked	Minimal	Minimal	None	None	Mod.	Marked
Date Operated		4-9-47	5-28-47	6-26-47	4-18-48	9-5-47	10-4-48	11-18-48	°°

° No Period Unless on Hormone Therapy.

°° Not Operated.

	Case										
	HBB 9	GH 10	MR 11	HW 12	LB 13	BS 14	NC 15	GK 16	KG 17	E Mc 18	SS 19
Age of Patient	34	22	23	21	27	28+	26	20	21	26	25
Marital Status	M°	M	M	S	S	M	M	M	S	M	M
Onset of Menses	11	13	14	12	14	14	14½	10	16	14	17
Age Onset Amennorrhea	21 ½	14 ½ Hyper- menorrhea	21	13	17	14	14½	17 Hyper- menorrhea	18	14	19
Pre-Op. Hormone Therapy	Yes°°	No	Yes	Yes	Yes°°	Yes	No	No	No	Yes°°	No
Pelvic Pain	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Headache	Yes Severe	Yes	Yes	No	Severe	Mild	No	No	No	No	Yes
Diagnosed Pre-Op.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	No

° Miscarried 7 Months After Marriage 12½ Years Ago.

°° No Period Unless on Hormone Therapy.

		Case											
		IBB 9	GH 10	MR 11	HW 12	LB 13	BS 14	NC 15	GK 16	KG 17	E. Mc 18	SS 19	
Cycle in Days	Pre Op	180-540	14-21	40-120	90-450	60-920	60-90	45-90	28-35	28-240	42-90	28-36	
	Post Op	33-36	28°	26-32	28-30	30-32	28-30	26-28	28-30	28	28	28	
Duration of Flow in Days	Pre Op	1-2	6-7	2-3	5	5	2-5	2-5	6-7	1-5	3	2	
	Post Op	5	6	5	5	5	5	4-5	5	5	5	6	
Character of Flow	Pre Op	Scant Mod.	Heavy Mod.	Scant Mod.	Mod. Mod.	Mod. Mod.	Mod. Mod.	Scant Mod.	Heavy Mod.	Scant Mod.	Scant° Mod.	Scant Mod.	
	Post Op												
Endometrial Biopsy		Not Done	Approx. Normal	Not Done	Not Done	Not Done	Not Done	Not Done	Not Done	Not Done	Resting Stage	Not Done	
Hirsutism		Very Heavy	Mod.	Mild	Mod.	Mod.	No	Mild	Mild	Very Heavy	No	No	
Date Operated		6-15-49	6-16-49	7-8-49	8-9-49	9-23-49	10-19-49	12-10-49	1-5-50	1-6-50	1-31-50	3-23-50	

° Only 1 Period 28 Days P. O. Got Pregnant Delivered April 1950.

three had normal spontaneous 28-day cycles from the time of operation through March 1949 at which time she again became amenorrheic. Amenorrhea has persisted with the exception of a short menstrual period in August 1949.

These failures we believe resulted from unwise over-caution in resecting ovaries that were unusually large.

Case one was re-operated a few months ago because of a large hemorrhagic corpus luteum cyst of the right ovary. At operation there was no evidence suggesting a persistence of or a return to polycystic ovaries. There were several omental adhesions to the previously resected ovaries.

(6) The syndrome of bilateral polycystic ovaries is readily corrected in the large majority of cases by surgical attack upon the gonads. Of the various ovarian plastic procedures advocated, bilateral wedge resection with suture is the most satisfactory. The syndrome represents one of the few entities which justifies surgical attack upon the ovaries. The operative procedure is simple—the results gratifying.

Lest surgery upon the ovaries fall into the state of disrepute it once justifiably held, every effort should be made to clearly establish a definite preoperative diagnosis. Any or all of the studies described under Diagnosis should be carried out in questionable cases.

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CARDIOVASCULAR HEART DISEASE *

JOHN F. RAINEY, M. D.

Anderson, S. C.

As the frontiers of medicine are rolled back, we anticipate much help in handling some of the problems that the older individuals present. Until that time is at hand, it is most urgently incumbent upon all of us to keep abreast of the recent medical developments and the more enlightened interpretations of the old problems that have been with us.

Doctor Miller, of Columbia, is discussing emphysema and the complications which arise. The differential diagnosis between the dyspnea of emphysema and the dyspnea of heart failure needs emphasis, and we are sure there will be drawn as straight a dividing line as possible between the two.

Doctor Hicks, of Florence, will discuss the "Lower Nephron Syndrome" and in the course of his remarks there will be emphasized the effect of electrolyte imbalance upon the cardiovascular system. The electrocardiogram gives a good indirect qualitative measurement of this disturbance.

The discussion will be confined to a few remarks concerning:

- (1) Paroxysmal rapid heart action
- (2) Carotid sinus syncope
- (3) Postural hypotension
- (4) Coronary and myocardial insufficiency
- (5) Thrombo-embolism
- (6) Prognosis

Picture in your mind's eye, if you will, a 77 year old patient before you whose apical heart rate and radial pulse rate is 130 per minute. The history is that, without warning, he felt weak while walking down the stairs about two hours after breakfast. There is no history of chest pain. On examination, the patient looks anxious, ashen. The pulse rate is absolutely constant. Blood pressure is 90/80. The heart sounds are distant. There is no past history of any cardiovascular difficulty.

A clinical diagnosis must be made to insure, if possible, the return of the heart rate to normal since an ineffective pulse pressure and a rapidly working heart are distinct liabilities in an arteriosclerotic individual.

While we are thinking of this man there comes across our mind a 65 year old woman who, four hours after an attack of acute chest pain, had no radial pulse and no blood pressure, an apex heart rate of 130 per minute. Vagal stimulation produced gradual slowing and a gradual return to the original rate of 130, and the electrocardiogram showed an anterior infarction with sino-auricular tachycardia. Oxygen, sedation and, most importantly, 500 cc. of bank blood were given, and now the patient is enjoying a normal

convalescence. We feel that the whole blood successfully ameliorated the shock as the condition was immediately quite different.

The 77 year old man whom we are discussing gives no history of pain, yet he is in shock and this dulls the sensorium for pain.

Another male patient of 75 comes to mind who for years had angina of effort; three weeks prior to hospitalization he was awakened with severe chest pain, which lasted for some hours. He remained in bed at home for three weeks but was hospitalized on account of sudden onset of weakness and palpitation. Examination revealed cyanosis, shock, an apical and radial pulse rate between 140 and 150 per minute, blood pressure of 100/90 and a tic-tac rhythm. The electrocardiogram revealed ventricular tachycardia.

In the 77 year old man before us vagal stimulation momentarily slowed the heart rate and the anticipated abrupt return to normal heart rate did not come about. The electrocardiogram showed nodal tachycardia which, to all intents and purposes, is the same as auricular tachycardia except that instead of the displaced pacemaker being in the auricle, it is in the auriculo-ventricular node.

In the 65 year old woman with the sino-auricular tachycardia, a return of comparatively normal function was obtained treating shock; the rapid pulse rate of the 75 year old man was corrected rather suddenly, after 18 grains of quinidine in 6 hours. The nodal tachycardia of the 77 year old man terminated one hour after 3 grains of quinidine. In the treatment of auricular tachycardia and/or nodal tachycardia there are other therapeutic agents equally effective.

There are two other types of paroxysmal heart action: auricular flutter and auricular fibrillation. Each may become permanent.

It seems to me that auricular flutter is largely an electrocardiographic diagnosis. The ventricle rate is usually so variable due to the irregular response to the auricular impulses and the vagal response so indefinite that we can hardly make the diagnosis clinically. Unlike the other types of paroxysmal heart action, the circumstances surrounding the onset offer no clues. The abnormality usually disappears with over-digitalization; if not, quinidine may be used. Others advise digitalis first and then quinidine.

Paroxysmal auricular fibrillation may and can occur during the course of acute infections, in thyroid disease, coronary thrombosis, rheumatic endocarditis, acute and chronic, and frequently for no discernible cause. If the condition is anticipated as frequently as

*Presented before Annual Meeting, S. C. M. A. May, 1950.

it may, quinidine is preventive. After it develops quinidine is corrective.

It seems to me that whenever one is in doubt in regard to the specific type of paroxysmal rapid heart action, quinidine is the safest and most effective drug.

The problem of postural hypotension is a common and unsatisfactory one. The symptoms range from momentary dizziness to syncope. The most extreme case of which we have record is that of a 73 year old hypertensive widow who suddenly fainted for the first time on arising from her chair. This recurred time and time again and finally she was hospitalized for study. The recumbent blood pressure was 180 systolic, 110 diastolic; the blood pressure, when supported in upright position, was not obtainable. This patient remained bedfast and died of an intercurrent disease. The most common type is that recently presented by an arteriosclerotic woman of 65 who had a recumbent blood pressure of 130/90, but standing had a blood pressure of 90/80 and a pronounced tachycardia. Hip length rubber stockings, an abdominal support and sleeping in the so-called "head up position" have helped her. We felt that the latter maneuver would perhaps "tone up" the vasoconstrictor reflexes.

It is not clear where the fault is in these cases. It has been shown to the satisfaction of some that in normal individuals there is a momentary hydrostatic fall in blood pressure at the level of the aortic arch. In arteriosclerotic individuals there is quite a delay in return of the blood pressure at the aortic arch level to normal. It is assumed that the proprioceptor end organs in the aortic arch area are damaged by the degenerative process and the lightly endowed reflex becomes more or less non-existent; therefore, the frequency of postural hypotensive episodes in the aged.

Be that as it may, we must always consider the hyperirritable reflexes of the carotid sinus when dealing with syncope. Cardiac standstill, sudden fall in blood pressure, or dizziness, stupor and convulsive movements are types of reaction to these hypersensitive reflexes. Recently we saw a 65 year old man who complained of periods of diplopia, stupor and generalized twitching of muscles. Slight carotid sinus pressure reproduced the diplopia, stupor and muscle twitching with cardiac standstill. This patient succumbed to a right cerebral thrombosis several weeks later. Ephedrine and atropine may be tried and sometimes resection of the carotid body may be necessary, though mortality is high.

It seems that a few remarks may be in order in regard to myocardial and coronary artery insufficiency.

Dyspnea on exertion, nocturnal dyspnea, pulmonary and or hepatic congestion, dependent edema, singly or in combination with or without a regular cardiac

rate, are indications for digitalization, and usually a permanent maintenance dosage.

Dehydration therapy is now routine for all cardiacs. Latent edema is avoided just as diligently as patent edema. Ammonium chloride is, in itself, an excellent diuretic. Continuous use of ammonium chloride lessens the frequency and quantity of mercurial medication.

Intractable cardiac failure may be due to excessive low blood chlorides.

Again, the sodium and water loss during a mercurial diuresis may be so great that a pseudo-Addisonian crisis arises and replacement therapy is an emergency procedure.

Too much discomfort can be produced by opiates. This may be eliminated by the simultaneous use of an opiate for pain and a barbiturate for anxiety.

The most frequent cause of death in congestive heart failure is pulmonary embolism and infarction. Anticoagulant therapy has been introduced to eliminate the possibility of thrombus formation anywhere within the vascular system. The use of anticoagulants is not simple and if their use is impossible on account of undependable laboratory facilities, the calculated risk can be lessened by:

- (1) Early ambulation
- (2) Straight leg resting (specifically do not use double Gatch mechanism or pillows in popliteal space for comfort, or any other reason)
- (3) Passive exercise of the extremities
- (4) Venous litigation with appearance of calf muscle tenderness
- (5) Cautious use, if not elimination, of antibiotic therapy

Prognosis in heart disease must always be guarded, yet I feel there is entirely too much anxiety and hopelessness attendant upon the diagnosis and treatment of heart disease.

Our ideas in regard to longevity and activity with angina pectoris, coronary thrombosis and myocardial insufficiency will change with an increasing accuracy in diagnosis and experience.

We have seen angina pectoris disappear following coronary thrombosis; we have seen angina pectoris disappear as time allowed for the development of an adequate collateral circulation, and lately we have seen all historical evidence disappear when the individual thusly affected developed a reconciliation within himself, no doubt, along with his collaterals.

All vestiges of bundle branch block may disappear and even if the condition remains, those with a long experience recite specific cases that are known to have had a bundle branch block for 20 years.

What it is that allows some to live long and others to die soon confounds the mind and experience, and we can only say, with Hypocrates, "Experience is fallacious and judgment difficult."

CONGENITAL HYPERTROPHIC PYLORIC STENOSIS*

A REVIEW OF 329 CASES

By

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In the present series 329 unselected cases of congenital hypertrophic pyloric stenosis had pyloroplasties performed between the years 1919 and 1949 at The Children's Hospital, Washington, D. C. It is the purpose of this paper to present the existing data gleaned from the records.

Of this number 265 (80%) were males against only 64 (20%) females. This is entirely out of proportion to the incidence of male and female births, and is also entirely beyond explanation.

Previous reports comment on the low incidence in negroes. There were 23 (7%) cases of this race. Of these, 22 (95.6%) were males.

There is a definite tendency for the anomaly to occur in first-born children. The incidence of first births numbered 171 (64.5%). Second births were 18.4%; third births, 12.4%; and fourth, fifth, seventh, and eighth births were each roughly 1% more or less.

Only 107 (33%) of these patients were entirely fed by formula. Some consider this finding an indication of the general proportion of breast-fed children rather than of the susceptibility to this defect.

One patient had an older brother who had a pyloroplasty. Also two patients had older brothers to die of pyloric stenosis. One patient had two first cousins who experienced pyloroplasties for this condition. One patient's mother and another's father had pyloroplasties. From this it appears that there is also a tendency, though not strongly marked, for more than one case to occur in the same family.

Two of these patients, being twins, were operated upon each on the same day at the age of seven weeks and a large tumor was found in each case. Their older brother was six years old at the time and did not have pyloric stenosis.

Another patient had a twin who also experienced a pyloroplasty at about the same time at another hospital. Another was one of twins, yet his twin had no evidence of pyloric stenosis. Many believe there is undoubtedly a genetic basis. As yet the method of inheritance is certainly undetermined and an environmental factor may play a considerable role in its production.

Two of these patients had large umbilical hernias which required surgical repair at a later date. One had a cleft-palate. These were the only developmental

defects noted in this series in conjunction with pyloric stenosis.

It was noted that the age of onset of symptoms was more likely to occur between the second and third weeks. Of a total of 321 cases, 87 (27.1%) experienced vomiting at the age of two weeks and 81 (25.2%) at the age of three weeks. Symptoms were present from birth in 36 (11.2%) cases and during the first week of life 33 (10.3%) noted vomiting. 44 (13.7%) developed symptoms during the fourth week. The fifth and sixth weeks each revealed only 5.2%. During the seventh, eighth, ninth, tenth, and twelfth weeks, respectively, less than 1% experienced the origin of symptoms.

In comparison with the age of onset of symptoms, of the 329 cases reported 80 (24%) had a pyloroplasty performed during the fourth week of life. During each of the third, fifth, and sixth weeks of life, 15% of the cases underwent operation for pyloric stenosis; while only 6% were operated on during the second week of life. 8% underwent surgery in the seventh and eighth weeks respectively. During each week from the ninth to the sixteenth less than 3% experienced surgery. One infant each had a pyloroplasty performed in the twenty-third and twenty-fourth weeks of life. These were the oldest infants in this series to have operation for pyloric stenosis.

Of the several important symptoms of pyloric stenoses, and the one which usually attracts the physicians' attention, vomiting is the most prominent. It was noted in every case of this series and in each case marked the onset of the condition. The onset may be sudden or gradual. Davison makes the point that the older the child the more likely is the onset to be abrupt. The vomiting which may be precipitated by the ingestion of only a few drops of food rarely begins as the projectile type, but in almost all of the cases promptly became so. In all the cases the vomiting was related to feeding. In every instance there was no bile present and the vomitus was strongly acid. There was always no initial anorexia and the child would nurse or take the bottle immediately after the vomiting ceased.

Most of the other symptoms of pyloric stenosis are a direct result of vomiting and, therefore, occur with considerable regularity. The bowels fail to move normally, not from constipation but because there is no intestinal residue. In this series there were scanty stools in 98% of the cases, while actual diarrhea was noted in only 2% of the babies. The stools as a rule

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were small and composed of mucus and bile.

Peristaltic waves across the epigastrium from left to right could be observed in 98% of the cases. Only seven cases (2%) did not show this feature. These waves appear shortly after the vomiting has begun and are best seen just after food has been taken and persist long after vomiting has ceased. When reaching the impermeable pylorus the waves appear to cease.

Such babies are usually strong and well at birth. In some series they are said to be stronger and weigh more at birth than the general average of $7\frac{1}{2}$ pounds. In this series the average birth weight was $7\frac{1}{2}$ pounds; the average weight at onset of symptoms was $7\frac{1}{2}$ pounds; and the average weight at operation was also $7\frac{1}{2}$ pounds. This rapid loss of weight is particularly striking because it occurs at a period when there should be rapid gains. The average weight following operation at the time of discharge from the hospital was $10\frac{1}{2}$ pounds.

There has been considerable controversy about whether or not a tumor can be palpated. The hypertrophic pylorus can be commonly felt as an "almond-shaped" tumor just beneath the right lobe of the liver. In this series the tumor was palpated in 241 (74%) cases. No tumor was felt in 71 (21.7%) cases, and equivocal in 14 (4.3%) of the cases reported. There are many techniques for examining the tumor which are most important and should be mastered by those treating this condition especially as some surgeons will not operate until they do palpate the tumor. The presence of a tumor is pathognomonic of pyloric stenosis.

As a rule an elevation of temperature was not noted until dehydration, which tends to come on rapidly, appeared; or until infection ensued. In this series 93% of the babies were greatly dehydrated and 95% were malnourished. Just as in any high intestinal obstruction, ketosis and alkylosis occur and glycosuria is occasionally noted. The dehydration leads to a scanty urine and a dry wrinkled skin. The urine contains very little or no chloride. Alkylosis manifests itself clinically in most cases in the form of irregular shallow respirations and frequent periods of apnea. A few cases experienced tetany manifested not by carpopedal spasm but by muscular rigidity and rarely by a convulsion.

The chief diagnostic discussion at the present time centers about whether or not X-ray studies should be made. Ladd states that if the five cardinal signs are present—projectile vomiting, scanty stools, loss of weight and dehydration, visible peristalsis, and a palpable tumor—X-ray is neither necessary or desirable. Others not in favor of X-ray studies state that barium in the stomach at operation adds to surgeon's difficulties; increases the possibility of opening into the duodenum; that lavage to remove the barium is an unnecessary tax on the child; and may be misleading. On the other hand, it is said to be useful to define the degree of obstruction and the amount of retention.

It is essential if the symptoms begin shortly after birth to establish the presence or absence of duodenal atresia. In the series of 329 cases, 55 (16%) babies received barium X-ray studies prior to operation. In 47 (85%) of these cases a large dilated stomach was reported and from 90 to 100% retention after $3\frac{1}{2}$ hours. In each of these cases a large tumor was demonstrated at operation. In six cases or 11%, the X-ray studies reported either a normal or slightly dilated stomach which emptied in a normal manner. In each of these cases a large pyloric tumor was demonstrated at operation. In two cases (4%), the stomach was seen to be dilated but at the end of $3\frac{1}{2}$ hours there was 50% retention of the barium in the stomach. Each case at operation had a large tumor.

Pre-operative Preparation: Surgical treatment should be resorted to immediately in those cases which do not respond to medical measures promptly. There should be no delay except for adequate pre-operative preparation. This condition is not a surgical emergency and far more harm may come from operating hurriedly on an ill-prepared patient than by waiting a day or so until conditions are right. Though essential, this pre-operative therapy can be reduced to a few points. Its aim should be to restore the normal electrolyte and fluid balance, the amelioration of malnutrition, and the control of complicating infection. In each of the 329 cases here reported such aims were carried out. It is rather difficult to evaluate the findings as the cases date over a prolonged period of time during which such therapeutic measures as transfusions, fluids, antibiotics, and other drugs and procedures saw their birth. For completeness, in this series of 329 cases, pre-operatively 186 received transfusions, 7 received plasma, and almost all received parenteral fluids.

As a rule most of the patients were given nothing by mouth; however, 150 cases received thick cereal feedings pre-operatively and of these in seven cases it was even necessary to give thick cereal feedings post-operatively. In one instance thick cereal feedings were required post-operatively not having been used before operation.

It is interesting to note that in 227 cases atropine and phenobarbital were given before operation.

In each case the stomach was lavaged just before operation to facilitate exposure and packing. The operative field is small, but it is proportionately much larger than in adults hence the child was in each case surrounded by hot water bags and all portions of the body were kept covered except the immediate operative area.

Pre-operative medication is not necessary and none was used in this series. Experience indicated that pre-medication with morphine may actually be dangerous.

Drop ether is the anesthetic of choice. So little ether need be used that the patients are awake on leaving the operating room. In this series 306 (93%)

received open drop ether alone; 6 cases (1.8%) were under local anesthetic using 1% novocaine with open drop ether as a supplement; in 9 cases (2.7%) 1% novocaine was the only anesthetic; in 3 cases (0.9%) a whiskey sugar tit was used as a supplement to a local of 1% novocaine; and in 5 cases (1.5%) ethyl chloride was used as an aid to inducing the patient followed by open drop ether. All writers emphasize the fact that from the standpoint of anesthesia the operating team must wait on the patient and not the patient on the team.

A Fredet-Rammstedt pyloroplasty was performed on each of the 329 patients in this series. Since the technical details of this operation are now well known, only the general features of special importance will be discussed.

There were 45 different surgeons participating in this series. A right rectus incision was the one of choice being used in 80% of the cases. In 14% of the cases a transverse type of incision was used. A mid-line was performed in only 2% and a right oblique was used in 4% of the cases.

A tumor was found in each of the patients in this series. It was described as large in 93% of the cases and small to moderate in size in 7% of the patients.

The chief risk of the operative procedure is perforation of the duodenum at the point where the thick pyloric muscle ends. The success of the operation depends on all of the muscle fibers being separated especially on the gastric side. The accident of opening into the duodenum has been observed most often to occur not with the knife but with the point of the hemostat while spreading the fibers. If the gut is perforated, small bubbles of air or bile will escape and if recognized can usually be easily closed with a small atraumatic type of stitch.

The duodenum was opened in 23 (7%) cases of this series. Only one of these died and that occurred just eight hours post-operatively. None developed evidence of peritonitis.

In the 22 cases in which the duodenum was perforated and lived, it is interesting to note the post-operative care. Two cases were given water in two hours and formula in four hours—recovery uneventful; five cases were given nothing by mouth for eight hours, then water and breast or formula alternately—recovery uneventful; seven were given nothing by mouth for twelve hours, then water and breast or formula alternately—recovery uneventful; three were given nothing by mouth for twenty-four hours, then water and breast or formula alternately—recovery uneventful; one case had nothing by mouth for twenty-four hours, Levine tube stomach suction for twenty-four hours, then water and formula alternately—recovery uneventful; two cases had nothing by mouth for forty-eight hours, then water and formula alternately—recovery uneventful; two cases had nothing by mouth for forty-eight hours, Levine tube

stomach suction for twenty-four hours, then water and formula alternately—recovery uneventful.

In only one case in which the duodenum was opened was a drain placed into the wound. It was removed in 24 hours with an uneventful recovery.

Evisceration at the time of operation is carefully avoided as is dragging on the Celiac plexus as the tumor is elevated.

Only 2% of the wounds were closed with through and through interrupted sutures, while 98% were closed in layers.

Thirty-five of the 329 cases were closed using fine catgut for the peritoneum and interrupted fine cotton for the fascia and skin. All the remainder of the wounds were closed using fine catgut for the peritoneum and fascia with interrupted silk sutures for the skin except one case which was closed with fine catgut and wire sutures. Skin clips were used in only one case.

The average length of operating time was 27 minutes. The shortest length of operating time being seven minutes and the longest operating time was seventy minutes.

The post-operative care of the child presents a problem of a rather perverted gastro-intestinal physiology. The head should be lowered until complete recovery from the anesthetic as this prevents the aspiration of mucus. The body heat should be carefully maintained and the diet should be regulated to insure adequate sugar and chloride requirements.

Immediately following operation in this series, as soon as the patient had reacted, water and formula were instigated in 61% of the cases. The other 39% of the patients had water and formula withheld for eight to twelve hours. The most important consideration is that the feedings should be small in quantity. Gastro-enteritis may follow the unwise administration of large quantities of food before the gastro-intestinal tract has regained its normal tone.

All of the patients received intravenous or subcutaneous fluids post-operatively. Only 39% (128 cases) were given blood transfusions after operation.

Atropine and phenobarbital were given in 20 of the cases post-operatively. Five cases received penicillin, one received streptomycin, and two received sulfadiazene post-operatively for either otitis media or other secondary infection.

Following operation only 3% of the cases experienced absolutely no vomiting. The remainder as a rule vomited several times.

All writers emphasize the importance of getting the child out of the hospital as quickly as possible. Brevity of hospitalization after surgery is one of the chief arguments in favor of this type of therapy. In this series the average total days spent in the hospital was seventeen days. The shortest was one day and the longest was one hundred days.

Separation of the wound edges with evisceration occurred in eight cases (2.4%). Four of these cases also had infection of the wound before separation. Separation occurred on an average of the fifth post-operative day. There were no deaths from wound separation and evisceration.

Infection of the wound occurred in twelve (3.6%) cases. Of these, only one died and that was due to acute peritonitis.

In two cases a secondary operation was necessary. The first of these had a pyloroplasty on a large tumor. His symptoms cleared after operation but returned so that seven weeks later a second operation revealed the duodenum to be stenosed at the ligament of Treitz by a thickened band. A gastroenterostomy was performed with complete recovery.

The second case continued to experience projectile vomiting after a pyloroplasty. The wound eviscerated on the fourth post-operative day. Two months later the abdomen became distended and a mass was palpated. A second operation revealed a large pyloric tumor with no evidence of the earlier pyloroplasty. Another Fredet-Rammstedt was performed and after a stormy post-operative course complicated by pneumonia, he recovered.

In this series there was a surgical mortality of 13 (3.9%) deaths following the pyloroplasty. An autopsy was performed in each instance and the findings are as listed below:

1. Died suddenly on fourth post-operative day.
Autopsy—1. Peritonitis
2. Gastro-enteritis (diarrhea).
2. Died suddenly on twelfth post-operative day.
Autopsy—1. Meningitis
(Staph albus and gram negative bacillus).
3. Died suddenly eight hours post-operative.
Autopsy—1. Pulmonary atelectasis.
4. Died on fourteenth post-operative day.
Autopsy—1. Peritonitis.
2. Atelectasis.
3. Subdiaphragmatic abscess.
5. Died on eight post-operative day.
Autopsy—1. Bronchopneumonia.
2. Peritonitis.
3. Gastroenteritis.
6. Died on first post-operative day.
Autopsy—1. Pulmonary atelectasis.
2. Coagulation defect (prothrombin deficiency as evidenced by bloody fluid in the peritoneal cavity, large bowel, and lack of clot formation in heart and large blood vessels).
3. Patent foramen ovale and ductus arteriosus.
7. Died on second post-operative day.
Autopsy—1. Bilateral pulmonary atelectasis.
2. Patent ductus arteriosus.
8. Died on sixteenth post-operative day.
Autopsy—1. Gastroenteritis (diarrhea).
2. Fibrocystic disease of pancreas.
3. Pulmonary atelectasis.
4. Hepatitis.
9. Died on fourteenth post-operative day.
Autopsy—1. Gastroenteritis (diarrhea).
10. Died on tenth post-operative day.
Autopsy—1. Peritonitis.
2. Pulmonary atelectasis.
3. Pulmonary and pericardial effusion.
11. Died suddenly eight hours post-operative.
Autopsy—1. Pulmonary atelectasis.
12. Died suddenly on second post-operative day.
Autopsy—Asphyxia due to aspiration of gastric contents.
13. Died suddenly at home on forty-sixth post-operative day.
Autopsy—1. Bronchopneumonia.

The chief causes of death are pulmonary atelectasis, peritonitis, gastro-enteritis, and bronchopneumonia. Other causes of death being meningitis, subdiaphragmatic abscess, developmental anomalies of the heart, coagulation defect of blood, fibrocystic disease of the pancreas, and asphyxia.

In each of the 329 cases of this series, examination of the laboratory findings prior to operation revealed an approximately normal hemogram and no abnormal urinary findings in any case.

It is interesting to note that 166 of the patients in this series were typed for blood groups as follows:

Type AB—	5
Type A—	68
Type B—	20
Type O—	73

Fifty-eight patients in this series had Rh determinations performed. Of these 48 (83%) were Rh positive and 10 (17%) were Rh negative.

Type	No. Rh Positive	No. Rh Negative
AB	1	0
A	24	2
B	4	1
O	19	7
	48	10

A follow-up was attempted in each of the 329 cases of this series. Due to the transient population of this area, contact was made with only thirty-six patients. A detailed history and follow-up of each of these revealed only one child to be underweight. The others were well developed, talking and walking at the proper age, and all seemed to be doing excellent in school work usually at the top of the class. All cases have made a normal sociological and psychological adjustment.

Follow-up Chart

Age of Patient	Number of Patients
1 year	4
2 years	8
3 years	7
4 years	1
6 years	2
7 years	7
8 years	1
9 years	4
11 years	1
14 years	1

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THE CLINICAL SIGNIFICANCE OF FOREIGN BODY GRANULOMAS: A Review

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There are two varieties of foreign body granuloma—one that is produced by animate and the other by inanimate material. The foreign substances may be introduced from without, as in injuries, or produced in the body, as in necrotic areas where cholesterol or fatty acid crystals are formed. It may be inserted in the form of sutures or ligatures in surgical operations, or fortuitously as dusting powder on surgeons' rubber gloves, even deliberately to escape military conscription or by the cosmetologist for purposes of "beautification." The one structural feature which distinguishes the foreign body granuloma of animate from that of inanimate origin is its proclivity to undergo necrosis either of its cellular elements, as in the tubercle, or of its causative organisms, as in the degenerate fungus of maduromycosis, or of both. The histologic portraiture of the foreign body granuloma is that of a localized or diffuse chronic productive inflammatory lesion with or without necrosis that is characterized by overgrowth of connective tissue or so-called epithelioid cells together with the formation of multinuclear giant cells arranged around or in apposition to the causative substance. The foreign body granuloma due to living organisms is capable of reproduction either locally or at a distance, or both, while the

granuloma of inanimate origin remains in the place of its birth for the length of its life.

FOREIGN BODY GRANULOMAS DUE TO ANIMATE SUBSTANCES

Tuberculosis.—The tubercle is the most prevalent and familiar example of a foreign body granuloma due to a living substance. If, however, as Prudden and Hodenpyle showed many years ago, the tubercle bacillus is killed and dead bacilli are insufflated into the lungs of rabbits, the bacilli produce epithelioid tubercles which are histologically typical except, of course, for the absence of caseation and inability to reproduce similar changes locally or in distant tissues. The reaction to dead as well as to living tubercle bacilli is due presumably to the insoluble waxy substance with which it is said the tubercle bacillus is provided. In view of the fact that the tubercle is a granuloma that may be due to either animate or inanimate foreign bodies, it is not surprising that granulomas caused by other inanimate substances are structurally similar, occasionally identical.

It has recently been stated that tuberculosis is an eradicable disease. An article in *Collier's* magazine by Dublin and Ratcliff¹ entitled "Let's Wipe Out Tuberculosis" says that "Tuberculosis can be stamped out

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completely, once and for all, within the next twenty years. We've the knowledge and the money, and we can easily build the facilities. The only thing we lack is organization for the all out attack." The article further relates that the Metropolitan Life Insurance Company, of which Dr. Dublin is statistician, built a sanatorium at Mt. McGregor for the Company's tuberculous employees with a capacity of 200 beds which was later increased to 350. After thirty years of operation the sanatorium was closed because only twenty-six of its beds were occupied, reduction in the incidence of tuberculosis among the Company's almost fifty thousand employees being due to early detection through routine chest roentgenograms and immediate isolation at Mt. McGregor. The authors recommend mass roentgenologic chest examinations and more sanatoriums for the tuberculous together with subsidies for the patients' families, a program which, if not entirely original, is praiseworthy and should meet with universal approbation. However, the problem presents another aspect, namely, that tuberculosis is not an eradicable disease. For example, the anatomic unit of tuberculosis is the tubercle. There are at least two views concerning the origin of the tubercle. According to one view, it is primarily a productive interstitial lesion that sooner or later undergoes necrosis and ruptures into an air vesicle, producing a minute cavity which communicates with the external air. According to another view, the tubercle is primarily an acute exudative vesicular pneumonitis in which necrosis of the exudate completes the formation of a cavity that communicates with the outer air. In either event, the cavity at first is of slightly more than microscopic dimensions. From this point onward the safety of the patient depends on whether the process of destruction or of repair assumes and maintains the ascendancy. In the meantime, tubercle bacilli are discharged, other persons are infected and the disease is perpetuated. It is conceivable that a cure for tuberculosis will be found. It is inconceivable that the disease will ever be eradicated. The seed-bed, although it may be greatly reduced, will always remain as a focus for the propagation and dissemination of tubercle bacilli. To anticipate the discovery during life of the nearly microscopic tuberculous cavity is expecting too much of man's diagnostic acumen. However, until the cavity is detected and controlled, the disease will be spread by innocent and unknowing harborers of tubercle bacilli and will continue to exist no matter how efficacious curative measures may be in individual patients. Without eradication of the seed-bed it is obvious that there can be no eradication of tuberculosis. Because every tubercle is a miniature seed-bed it follows that tuberculosis cannot be eliminated until the last tubercle is destroyed.² These considerations seem not to have been taken into account by Dublin and Ratchiff.

The belief appears also to be prevalent that tuberculosis is a disease of youth or of comparative youth and that persons over 50 are rarely infected. Osler,

whose "Principles and Practice of Medicine" perhaps more than any other single book has influenced medical thought in recent decades, states that, although one-seventh of the human race dies of tuberculosis, "a large proportion of all individuals become infected before reaching adult life." In Christian's 1947 revision of Osler's book, the statement appears that "fatal tuberculosis . . . is more common between the 18th and 35th years." According to necropsy experience at Bellevue Hospital, pathologically significant tuberculosis in persons under forty is recognized clinically in a high proportion of all cases, while in those over fifty considerable numbers of cases occur but are overlooked clinically. In other words, in many tuberculous patients over fifty years of age insufficient precautions are taken to prevent the spread of the disease by carriers of tubercle bacilli (Medlar).³

Boeck's Sarcoid (Lupoid).—Besnier's lupus pernio, Schaumann's lymphogranulomatosis benigna and Boeck's sarcoid are probably slightly different forms of the same disease. The condition has been described in whites, Negroes and in the American Indian, usually in young adults, beginning insidiously and progressing slowly, long remissions or apparently complete recoveries occurring occasionally. It was described by Boeck⁴ in 1899 as a disease characterized by multiple benign nodular lesions of the skin of unknown cause associated with enlargement of the superficial lymph nodes. This conception has since been extended to include similar or identical changes in practically every organ in the body, among them the deep as well as the superficial lymph nodes and the spleen, thus simulating the picture of Hodgkin's disease, hence the designation lymphogranulomatosis benigna. Histologically, the changes in sarcoid bear a resemblance to those in tuberculosis, although necrosis is not often observed and giant cells are usually scant. When, however, giant cells occur in the tubercle-like formations of sarcoid, there are sometimes deposits of basophilic granules in them such as are almost never, if ever, encountered in the giant cells of tuberculosis—the so-called Schaumann bodies. In other cases the giant cells in sarcoid contain stellate or asteroid cytoplasmic inclusions that have been variously interpreted as disintegrated elastic tissue, parasitic forms, astrospheres, fibrinoid material and fatty acid crystals. Identical inclusions have been described in other conditions, including the walls of an omental cyst, in obliterating capillary bronchitis, in a myomatous uterus, in the giant cells of leprosy, in a granulomatous lesion of the face following the injection of paraffin and in the giant cells of a regressing corpus luteum. In still other cases of sarcoid the giant cells contain vacuoles of indeterminate origin.

Discussion concerning the nature of the disease sarcoid is focalized almost exclusively on whether it is a form of tuberculosis. In 1910, Kyrle⁵ and Morawetz,⁶ independently of each other, and in 1914, Sweitzer,⁷ injected emulsified sarcoid tissue into guinea pigs and produced lesions in them which were

histologically indistinguishable from those of tuberculosis. However, the validity of these experiments has been challenged on the ground that no precautions were taken to prevent cage infections. In 1941, Longcope⁸ reported that, when sarcoid tissue was inoculated into guinea pigs, rabbits and pigeons, no evidence was obtained to support the view that the disease is caused by human, bovine or avian tubercle bacilli. In other cases acid-fast bacilli have been demonstrated in the lesions of sarcoid, but whether these were tubercle bacilli or not is debatable. Furthermore, in cases of sarcoid it has been shown that plasma proteins are increased, especially globulin. On the other hand, Seibert⁹ and her co-workers have shown that increase of the globulin fraction also occurs in tuberculosis. Although the cause of sarcoid is unknown, the opinion nevertheless appears to be justified that the lesion belongs in the category of foreign body granulomas due to living substances.

Syphilitic Granulomas (Gumma).—In the tertiary stage of acquired syphilis and in late congenital syphilis foreign body granulomas occur in the form of localized or diffuse gummatous lesions that are characterized, microscopically, by a preponderance of lymphocytes, a sprinkling of epithelioid and plasma cells and an occasional multinuclear giant cell, the latter arranged around tissue debris derived from neighboring areas of necrosis. As a rule, the gumma is solitary, sometimes it is multiple, and any tissue may be involved—skin, mucous membranes, viscera and bone. Among syphilitic lesions the structure of the gumma is unique because it is the only one of them which belongs in the category of granulomas.

In former years the treatment of syphilis consisted in the administration of mercury and the iodides over an arbitrary period of three years and even at the expiration of that time it could not be said with certainty that a cure had been effected. These drugs have since been almost completely abandoned in favor of the antibiotics, notably penicillin, which is not only efficacious, especially in early syphilis, but acts with extraordinary rapidity.

Leprosy.—Among the ancients, leprosy appears to have been a generic term for many varieties of skin disease, some of which, according to Hebrew tradition, rendered a person ceremonially unclean. Throughout the middle ages the disease prevailed extensively in Europe where the number of sanctuaries is said to have exceeded twenty thousand. At the present time, leprosy is known in Iceland, Norway and Sweden, parts of Russia and of China and India and in certain provinces of Spain and Portugal. In the United States the disease is endemic in Louisiana, Florida, Minnesota, New York and Texas, while in the Dominion of Canada foci exist in New Brunswick, Cape Breton and Nova Scotia. The disease is also endemic in the West Indies and in Mexico, in the Sandwich Islands, the Philippines and Hawaii.

Clinically, two main varieties of leprosy are dis-

tinguished, the tuberculoid or nodular leprosy, and the anesthetic form. Tuberculoid leprosy is characterized by the appearance of areas of erythema, which later become pigmented and finally develop into nodules. The disease also affects the mucous membranes of the mouth, throat and larynx. In addition, there may be loss of hair and nails together with distortion of the hands and feet and destruction of the bones and joints, loss of phalanges causing shortness of the corresponding digits. When the disease is fully developed, the face assumes the so-called leonine look due to thickening and folding of the skin. The anesthetic variety, the most common tropical form, involves the peripheral nerves and results at first in hyperesthesia followed soon by complete loss of sensation. The leprosy nodules vary in size from milium lesions to those which are several centimeters in diameter. Histologically, the changes consist of large mononuclear and epithelioid cells with an intermingling of lymphocytes, plasma cells and an occasional multinuclear foreign body giant cell. Between the cells and in the cytoplasm of the giant cells, characteristic acid-fast bacilli are found, usually in great numbers arranged singly or in multiples, and often in clusters containing literally countless hundreds of organisms. Although the bacillus leprae of Hansen is accepted in many quarters as the cause of leprosy, the three postulates of Koch have not been satisfactorily met—the organism is not demonstrable in all the lesions of leprosy, it is doubtful if it has ever been successfully cultivated on artificial media and the disease has not been reproduced in experimental animals.

The treatment of leprosy consists of measures that are either preventive or remedial. In the preventive treatment it is regarded as advisable immediately to isolate the child newly born of leprosy parentage and to place it permanently in an environment that is known to be leprosy-free. This procedure is a test of parental fortitude but promises protection to a considerable percentage of the offspring. The most recently introduced remedial treatment of leprosy is with the sulfone derivatives, including glucosulfone sodium or promin, sulfoxone sodium or diasone, thiazolsulfone or promizole, promaceticin and sulfetrone. Glucosulfone sodium is given intravenously, the others orally. From three to six months of treatment is usually necessary before improvement is noticeable, while from three to four years are required before disappearance of *Mycobacterium leprae* may be reasonably anticipated. Although treatment by sulfones is regarded by many as promising, there are those in informed quarters who still adhere to the use of chaulmoogra derivatives.

Rheumatic Granulomas.—The curious subcutaneous structures encountered in rheumatic fever, especially in children, were first described by Meynet and occur in the form of nodules attached to tendon sheaths and fascia. They vary in size from a few millimeters to a centimeter or more and are most numerous on the fingers and wrists but are also seen in the region of

the elbows, knees, the spines of the vertebrae, the scapulae and in the scalp. As a rule, they are neither tender nor painful and, in some instances, disappear spontaneously. They appear oftenest in the declining stages of rheumatic fever and have been observed with noticeable frequency in association with chronic rheumatic valvular lesions. Histologically, at least two varieties are described. In one variety, the nodules are composed of a central area of necrotic material around which, arranged in palisade fashion, are numerous large mononuclear cells and variable numbers of multinuclear foreign body giant cells. In the other variety, the nodule is made up largely of rounded or short spindle-shaped cells and an occasional multinuclear giant cell, the latter formed around the remains of degenerate collagen fibrils. Whether the Aschoff bodies, which occur so often in the myocardium, left auricular endocardium and elsewhere in rheumatic fever bear any relationship to the subcutaneous nodules in the same disease is debatable. The Aschoff bodies are usually found in muscle tissues, either the myocardium or the walls of the smaller blood vessels, and are composed of a small central collection of necrotic material around which are numbers of spindle and plasma cells together with an occasional multinuclear giant cell, the cytoplasm of the latter containing foreign body inclusions consisting, apparently, of muscle debris.

Tularemia.—Tularemia is a plague-like disease of rodents which may be transmitted to man by the bite of a flea or tick, or by contamination of the skin or conjunctivae with tissues or body fluids of infected rabbits, hares and the like. The disease, which is highly infective, is caused by *Pasteurella tularensis*, and was first identified in Tulare County, California, hence its name. Tularemia has now been recognized in practically every State in the Union. In the initial stage it is usually manifest as an acute ulcerative lesion followed by necrotic changes in the regional lymph nodes and even in the spleen, liver, lungs and other viscera. In the subsiding stage the lesions become granulomatous and bear a resemblance to those of tuberculosis. Microscopically, a central area of necrosis is surrounded by a layer of radially arranged epithelioid cells, scattered lymphocytes and a few multinuclear giant cells, the latter containing phagocytosed organisms.

Embryonal Fat Cells and Foreign Body Granulomas.—The histologic study of embryonal fat cells in chronic productive inflammatory lesions shows, among other things, that these cells are migratory. This phenomenon is displayed in the pathologic histology of the intestine, mesentery and mesenteric lymph nodes in a disease described in 1907 by Whipple,¹⁰ characterized, clinically, by the presence of a great abundance of neutral fat and fatty acids in the stools, by vague signs referable to the abdomen, and by a variety of fugitive arthritis involving multiple joints. With the exception of the joints, which could not be investigated post mortem, the anatomic

changes were limited to that part of the body mechanism which has to do with the absorption of fats, namely, the small intestine and its lymphatic drainage system. The intestinal villi are enlarged on account of extensive deposits in them of neutral fats and fatty acids together with the infiltration of embryonal fat cells and by the presence of multinuclear giant cells. The submucous connective tissue and the mesenteric nodes are similarly affected. In a patient with Whipple's disease who was observed at Bellevue Hospital the histology of a nodule removed from the region of the pancreas during a surgical operation, revealed changes in agreement with those described by Whipple in the intestine and mesenteric nodes. The framework of the nodule was composed of scattered connective tissue trabeculae between which were vast numbers of rounded, oval or polygonal fat cells of the embryonal type together with giant cells containing abundant fat granules. Since the appearance of Whipple's paper twenty-one additional cases have been described¹¹ and the disease is now regarded, at least by some pathologists, as one in which degenerate fat cells produce a diffuse foreign body granuloma.

A localized nodular form of foreign body granuloma involving embryonal fat cells has been described under the dubious designation of adipo-necrosis. The lesion is due to some sort of injury, such as the infusion of excessive quantities of saline solution into subcutaneous fat tissues, usually in the region of the breasts. The nodules are composed of mature connective tissue together with fibroblasts, embryonal fat cells and giant cells, the latter containing remnants of degenerate fat. The lesions may rupture through the skin and give rise to obstinate sinuses.

Foreign Body Granulomas in Maduromycosis.—Maduromycosis is a fungus disease which was first described by Van Dyke Carter as an endemic infection in and around the City of Madra in the Madras Presidency of India. The disease has since been recognized in other districts of India and in Ceylon, Cochin China, the Netherlands East Indies, Africa, Argentina, Cuba, Mexico, the United States and Canada. It occurs most often in arid tropical and subtropical climates among men who are engaged in agricultural pursuits and who work with bare feet. The disease is rare in women. Infection commonly follows the pricks of thorns. Unlike actinomycosis, which is most frequently found in cattle and swine, maduromycosis is apparently confined to man. While infection in actinomycosis is transmissible from one part of the body to other parts, maduromycosis remains localized in the area originally involved. The disease most often affects the foot. Occasionally it occurs in the region of the buttocks, the thigh, the knee and the ankle, and, apparently most rarely of all, the hand. In a review of the literature to May, 1941, Symmers and Sporer¹² found reports of 38 cases of maduromycosis in the United States. Since then 18 additional cases have been reported in North America, or a total of 56. The hand was affected in

only three of these cases: two in the United States and one in Mexico. In one instance of maduromycosis of the hand the patient had never been outside of New York City.

Twenty-two species of fungi belonging to ten genera and four families have been implicated in the production of various types of maduromycosis. In spite of its multiplicity of causes, the different types clinically may resemble one another closely and are divisible into three groups, the commonest of which is characterized by nodular granulomatous lesions in the skin or in the skin and subcutaneous tissues, occasionally involving bone. Spontaneously, or sometimes as the result of injury, the nodules rupture and discharge mucopurulent material containing white, yellow or black granules, the color of the granules depending on the type of fungus concerned, the white or yellow varieties apparently prevailing as in infection by *monosporium apiospermum*. In the case of maduromycosis of the hand recorded by Symmers and Sporer in 1944, Symmers¹³ later isolated a black grain fungus which was identified by Emmons¹⁴ who placed it in the genus *Phialophora* and named it *Phialophora jeanselmei*.

Histologically, maduromycosis is characterized by three different types of foreign body granuloma, all of them arranged around disintegrated chlamydospores. One type is immature and the disintegrated chlamydospores in it are displayed against a background composed almost entirely of polymorphonuclear neutrophilic leucocytes together with an occasional foreign body giant cell. The second, or intermediary type, contains clumps of disintegrated chlamydospores and young giant cells, many of which present curious configurations and are poor in nuclear chromatin. Granulomas of this type are often encapsulated, usually by young connective tissue. The third type of granuloma is mature. The giant cells in it engage in phagocytosing waste material derived from the disintegration of chlamydospores. In most instances the mature granuloma is encapsulated by well organized connective tissue. Histologically, maduromycosis could scarcely be confused with any other known disease, more especially with actinomycosis. The granuloma of maduromycosis is formed around degenerate chlamydospores, that of actinomycosis around ray fungi. Both are foreign body reactions but bear only a remote resemblance to one another.

Because of military activities in localities where maduromycosis is prevalent, it is to be expected that numbers of men returning to the United States will be invalidated with this disease. Physicians should be on the alert for its appearance in this and other countries where it has been heretofore almost unknown. It seems that drugs such as sulfonamide, penicillin and aureomycin have not thus far been adequately tried in the treatment of maduromycosis. However, encouraging results are sometimes obtained with the use of large doses of iodides. If, on the other hand,

the disease is recognized sufficiently early, curettage or even excision of individual nodules as they arise may be undertaken to remove all of the diseased tissue. In the later stages, more especially if bone is penetrated, amputation is advocated by those who have had the most experience with the treatment of this disease.

Blastomycosis.—Blastomycosis is commoner in males than in females and occurs usually in middle life. It is caused by *Blastomyces dermatidis*, a species of yeast which, in tissues, assumes the form of bicon-toured disks, mycelia occurring rarely. Clinically, the disease is divisible into two forms. In one the changes are confined to the skin, while, in the other, they are generalized. Cutaneous blastomycosis is characterized by proliferation of epidermal cells in the form of large, papillary prolongations into the corium containing collections of polynuclear leucocytes together with multinuclear giant cells built around foreign bodies consisting of disk-like budding organisms. The papillomas are closely packed and elevated above the surface as nodules varying in size from a few to many centimeters showing, in the more prolonged cases, areas of cicatrization or healing. In systemic blastomycosis abscesses may occur in any organ in the body, all of them showing collections of polymorphonuclear leucocytes together with multinuclear giant cells enclosing bicontoured disk-like organisms. In cutaneous blastomycosis the disease may persist for months or even for years and is seldom fatal, whereas the mortality in generalized blastomycosis is high. Treatment consists of large doses of potassium iodide combined with radiation. Drugs such as the sulfonamids, penicillin, aureomycin and the like appear not to have been adequately used in the treatment of blastomycosis.

Coccidioidal Granuloma.—Coccidioidal granuloma, dermatitis coccidioides, valley fever, desert fever or California disease, as it is variously known, is due to infection by *coccidioides immitis*, a species of fungus found in soil. The disease is most frequently seen in the San Joaquin Valley in Southern California but has been encountered elsewhere, especially in regions immediately adjacent, as well as in Utah, Nevada, Arizona and in West Texas along the Mexican border. The primary lesions may be in the skin but more often the deeper viscera are involved. According to Ophüls, there are three clinical types: (1) primary skin infection followed by generalization; (2) primary pulmonary lesions followed by generalization without skin involvement; (3) primary pulmonary lesions and secondary subcutaneous involvement. In addition, there may be primary naso-pharyngeal, pelvic, meningeal or osseous infection. Histologically, the structure of the coccidioidal granuloma is that of a chronic productive lesion in which multinuclear giant cells are built around disk-like organisms that multiply by endogenous spore formation, differing in this respect from the causative organisms in blastomycosis, where reproduction occurs by budding. Unlike blastomycosis

treatment by potassium iodide is of little avail. In coccidioidal granuloma the latter-day antibiotic drugs as yet seem not to have been adequately used.

Monilial Granuloma.—Monilial granuloma is a rare and frequently fatal disease due to infection by the yeast, *Candida albicans*. It begins in infancy or early childhood, usually in the form of an apparently simple oral thrush, but ultimately involves the finger nails and paronychia tissues and the skin of the scalp and face. It appears that there are only fourteen cases recorded in the literature on medicine.¹⁵ Clinically, the lesions occur in the form of a papular eruption involving the scalp, forehead, nose, cheeks and lips. The papules are highly vascularized and bleed easily. Occasionally the lesions progress to the formation of cutaneous horns. Histologically, the changes in the skin consist of a dense infiltrate of lymphocytes and plasma cells together with multinuclear giant cells, the cytoplasm of the latter enclosing foreign bodies in the form of spores or mycelial remnants.

Regional Ileitis.—The disease which is now called terminal, segmental or regional ileitis appears to have been known to Abercrombie who, in 1828, published the case of a girl, 13 years of age, in whom the clinical and pathologic findings were those of a lesion that might well be interpreted as belonging in this category. It remained, however, for Moore, in 1882, to describe, apparently for the first time, the microscopic as well as the naked eye changes in a case of regional ileitis with intestinal obstruction. Moore reported the absence of tubercle bacilli or evidence of carcinoma and stated that the obstruction was due to "long continued inflammatory changes." No further mention of the condition appeared until 1905 when, in rapid succession, Wilmanns, Moynihan, Robeson, Moschowitz and Wilensky, Crohn and many others recorded cases with sufficient accuracy of detail to establish the condition as a clinical and pathologic entity.

Regional enteritis may affect both the small and large intestine although its site of predilection is in the ileum and especially in the terminal segment immediately proximal to the ileo-cecal valve. The lesion occurs oftenest in young adults and is clinically recognizable because of long continued diarrhea together with the characteristic picture which it presents on x-ray examination; the barium enema forms a cylindrical cast so that this part of the gut resembles a segment of rubber hose. The wall of the affected segment is brawny and intensely red, while patches of fibrin may be present on its serosal surface. On opening the bowel the mucosa is bright red and smooth. In the mucosal surface sunken scars are sometimes visible and areas of ulceration may be present, varying from shallow lesions to those which are deeply fissured, sometimes serpiginous. The mucosal wall is edematous, rubbery to the touch and, in advanced cases, perforations may be present or fistulous tracts may penetrate the abdominal parietes or establish communications

between adjacent loops of intestine. Microscopically, the mucosa shows signs of intense acute inflammatory changes and may be covered by slough and fibrinous exudate. Throughout the wall of the gut, but especially in or between the muscle layers, are tubercle-like bodies composed of fibroblasts, epithelioid and giant cells, the latter often containing crystalloid material. It appears that tubercle bacilli have never been demonstrated in the lesions of terminal ileitis.

Lymphogranuloma (lymphopathia) venereum. — Lymphogranuloma venereum is a venereal disease of unknown cause, the primary lesion of which may occur in any part of the external genital apparatus and is usually inconspicuous, consisting of a small, moist and shallow, painless ulcer that may be easily overlooked. The initial sore is followed in a month or more by enlargement of the inguinal lymph nodes due to inflammatory lesions that are nodular and may be acute or chronic. Eventually, the nodule resolves itself, histologically, into palisaded layers of epithelioid cells surrounding a central area of necrotic tissue together with multinuclear giant cells formed around particles of cell debris. The disease is not always limited to the genitalia and regional lymph nodes, but may involve the perineum, anus and rectum, especially in women. Lymphogranuloma venereum is to be sharply distinguished from granuloma inguinale. The latter disease is manifest as a chronic ulcerative lesion which occurs most frequently in Negroes and appears oftenest in the inguinal region, but may involve the external genitals, the perineum, the inner surface of the thighs, the anus, rarely the lips, and in the female, the vagina. According to one view it is a disease of venereal origin; in other quarters it is regarded as an independent entity. So-called Donovan bodies are constant in the affected tissues and by some are regarded as causative, by others as secondary invaders. The disease is endemic in some tropical countries and absent in others. Thus, in certain parts of the West Indies it seems not to occur at all while in British Guiana it is common. Moreover, it presents different aspects in different races. In Negroid peoples the changes are the most pronounced. When other races, such as Indians become infected in a country where most of the sufferers are Negroes, the lesions present recognizable differences in the two nationalities, the growth in the Indian being less coarsely granular and tending to remain localized, whereas in the Negro it spreads extensively. The disease was first described in the United States in 1920 by Symmers and Frost,¹⁶ who observed it in native Negroes, none of whom had ever been outside of the United States. It is now known to be widely prevalent in this country. In the Fiji Islands, the Melanesian immigrants are said to suffer from a disease which, although it resembles the ordinary form of granuloma inguinale, differs from it in that the lesions are softer, more pronounced and spread by contact, so that multiple discrete growths arise. In addition, variations in severity depend on the part involved, growth and destruction being more

rapid on mucous than on cutaneous surfaces. Finally, there is a variety of granuloma inguinale that is attended by such marked obstruction to the lymphatics that it produces chronic edema of the vulva, penis or scrotum, resembling elephantiasis. Histologically, the lesions of granuloma inguinale bear no resemblance whatsoever to those of lymphogranuloma venereum.

(To be continued in next issue)

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CANCER

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CARCINOMA OF THE SKIN

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The most common type of malignancy seen is carcinoma of the skin. This frequency is not reflected in mortality statistics as the curability of these lesions is so high. An appreciable number of deaths each year, however, are due to skin cancer. Patients generally note malignant lesions of the skin early as the majority develop on the exposed surfaces, but their appearance is so innocuous that medical advice is not sought promptly. If, however, the physician maintains a high degree of suspicion, accurate diagnosis by biopsy and appropriate treatment should result in a high rate of cure.

A number of skin lesions are well recognized as conditions in which cancer of the skin is more likely to develop than in normal skin. These should be readily identified by the family physician and, if any unusual change takes place, prompt biopsy should be performed. The premalignant lesions, which include the "precancerous dermatoses," are senile keratoses, keratoses due to arsenic, tar or radiation, burn scars, chronic ulcers, chronic draining sinuses and xeroderma pigmentosum. Moles and nevi are not included as the benign nevi and malignant melanomas will be the subject of a later paper. Leukoplakia has been omitted as this lesion develops on mucous membrane or the junction of mucous membrane and skin and should be considered when these various sites are discussed. Bowen's disease also is not included as most authorities feel that this lesion is frankly malignant, rather than premalignant, and should be so treated.

Montgomery¹ and Ullmann² have provided excellent descriptions of the premalignant skin lesions.

Senile keratoses most frequently develop in patients with farmer's skin or sailor's skin. The latter results from chronic exposure to the sun and wind over a period of many years in persons whose occupation keeps them in the open. Certain persons are more susceptible to these skin changes; those who have a fair or ruddy complexion, who burn easily in the sun and do not tan, and who have excessively dry skin.³ Others are less susceptible; Arabs, South American Indians and Negroes seldom develop senile keratoses and skin cancer despite chronic exposure to the sun.⁴

The typical appearance of the face in farmer's skin is well known. The skin over the forehead, where protection has been afforded by a hat, is smooth, white

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and pliable whereas in sharp contrast the remainder of the face, the ears and the neck are shiny and red, with areas of pigmentation, chronic hyperemia and telangiectasia. The dorsum of the hands is similarly affected. On this basis the senile keratosis usually develops as fairly discrete, flat or slightly elevated, brown to grayish, keratotic papules or poorly defined, scaling patches. The lesions are usually multiple and vary in size. The scales are frequently shed or picked off and points of bleeding may be noted following their removal. A peripheral zone of erythema and the presence of induration suggest malignant change. From 20 to 25 percent of senile keratoses develop into malignancy and 90 percent of these are squamous cell carcinoma.¹

Seborrheic keratoses (*verruca senilis*) are to be differentiated from senile keratoses as seborrheic keratoses rarely become malignant. Seborrheic keratoses are sharply circumscribed, vary in size, and are usually elevated. They have a verrucous, greasy crust which may be wiped off, and are firm and rubbery rather than hard. The color varies from light brownish yellow to a brownish black. Most commonly, seborrheic keratoses occur on the trunk, especially the back. They should be examined periodically but require no treatment other than for cosmetic reasons.

Prevention of the development of farmer's skin is obviously important. If the occupation cannot be changed, then some degree of protection may be given by the application of a material such as lanolin or olive oil. Rothman and Henningsen⁵ have demonstrated the protective value against sunburn of para-aminobenzoic acid, using 15 percent in Ruggles vanishing cream. A single senile keratosis in a young patient had probably best be removed whereas in older patients with multiple lesions, careful observation with immediate biopsy of any suspicious lesion is indicated.

Arsenical keratoses develop after the use of arsenic in susceptible individuals, at times many years afterward. The lesions occur mainly on the palms and soles, and are usually associated with a diffuse, rain-drop type of arsenic pigmentation. The keratoses vary in size but may be quite large and thick; these are most apt to become malignant. Lanolin or similar ointments may be applied to small lesions but excision will probably be necessary for the larger ones.

Tar keratoses may develop in workers exposed to this material over long periods and the probability of malignant change is present to the same extent as the arsenical keratoses and to a greater degree than the usual senile keratoses. The treatment is the same as that for arsenical keratoses.

Radiation dermatitis as a precursor of malignancy is, of course, very well known because of the thoroughly if painfully acquired knowledge concerning the dangers of radiation learned by the early radiologists, since many of the pioneer x-ray workers died from carcinoma developing in the exposed areas. In patients, malignancy may develop in the area of radiation dermatitis many years after excessive treatment with radiation. The dry, atrophic skin with the characteristic telangiectasia should be observed carefully for keratoses and developing malignancy. Where feasible, excision should be carried out. Further radiation in any form and ultraviolet light are contraindicated.

Burn scars, although very common, are infrequently the site of malignant change. Carcinoma developing in a burn scar, however, is seen frequently enough that inspection of these scars should be carried out at yearly intervals. Should any suspicious change occur, biopsy should be performed. The malignant lesion is usually a squamous cell carcinoma, and extensive removal may be required. If the tumor is on the extremity, amputation is occasionally necessary. *Chronic ulcers*, such as varicose ulcers, are in the same category in that the ulcers are very commonly seen, but malignant change occurs in only a very small percentage of cases. The possibility, however, must be recognized and biopsy performed when indicated. *Chronic draining sinuses*, such as those encountered with chronic osteomyelitis, empyema, fistula-in-ano, etc., are also occasionally the site of origin of carcinomatous change. In the chronic ulcers and sinuses, suspicious areas must be subjected to biopsy.

Xeroderma pigmentosum is a rare congenital lesion in which the skin is abnormally susceptible to solar rays. The children are usually brought to the physician only after malignant areas have developed on the exposed surface. Brockington⁶ has studied carefully one family in South Carolina in which a number of children have died from carcinoma of the skin developing in xeroderma pigmentosum, and will report these cases later.

Pathology

For purposes of simplification, only the three most common types of malignancy of the skin will be considered: basal cell, squamous cell and the mixed or basosquamous cell carcinoma. In a series of 1,224 malignant skin tumors seen over a period of ten years, Stout⁷ found 605 basal cell and 309 squamous cell lesions, the remainder being the more infrequent types. Stout pointed out that in malignant tumors of the skin growth starts at a focal point and continues centrifugally in all directions. The growth, however, is not at an equal rate and usually is predominantly in one of three directions. It may grow outward from the body surface producing a projection, penetrate inward into the underlying tissues producing ulceration, or grow parallel with the body surface. Generally, the

infiltrating type is the most malignant, most likely to metastasize and hardest to eradicate.

The basal cell carcinomas do not metastasize but have marked propensities for invasion and destruction of contiguous tissue including bone and cartilage. Most basal cell lesions which have been thought to metastasize have been found to be basosquamous carcinoma. Squamous cell carcinomas do metastasize to the regional lymph nodes. Taylor, Nathanson and Shaw⁸ studied a large series of squamous cell carcinomas on the extremities and found lymph node metastases common from lesions on the arms, feet and legs but less so from the fingers and hands. They found metastases were more likely with lesions of longer duration, larger size and higher grade. The size of palpable nodes was not a dependable guide, although the larger nodes were more apt to contain metastases.

Diagnosis

Basal cell carcinoma occurs chiefly on the upper part of the face, above a line from the corner of the mouth to the lobe of the ear. Andrews⁹ has described clearly the appearance of the early lesions. A scaly spot becomes slightly thickened, glistening and waxy or pearly in appearance. In one type, the earliest lesions feel like a small, inverted button. Small, waxy papules may coalesce to form a plaque-like lesion, and at the border similar papules fuse to produce the characteristic elevated rolled edge. The center becomes crusted and, after this is knocked off or pulled off, another crust forms and so on repeatedly. Other clinical forms occur, in addition to the button and the plaque types, the most important being the rodent ulcer. This is a burrowing, mutilating, destructive, ulcerative process which may completely destroy the orbital contents, the external ear or the nose. The ulceration is deep and punched-out, the floor is dirty and the edges crusted. If the crust is removed, the rolled waxy border may be seen.

The squamous cell carcinomas arise usually on pre-existing areas of keratosis, predominantly on the skin of the cheeks, ears, pre-auricular, temporal and malar regions and the dorsum of the hands. It typically begins as a warty growth, the keratotic projection comes off and a slightly bleeding base results. This becomes crusted and the sequence is repeated, each time the lesion becoming a little larger until finally ulceration develops. The borders are indurated. The lesion may be superficial or deep projection and invasion may be present. Fixation to deeper structures may occur.

Biopsy

In the majority of cases, a diagnosis can be made clinically and identification of the type can be made in a considerable number on the basis of the site and the appearance of the lesion. A biopsy, however, must always be carried out for confirmation of the clinical diagnosis. It cannot be emphasized too strongly that the biopsy must always be performed, regardless of

the type of therapy to be employed or the confidence of the physician that he can cure the lesion, regardless of type. In small lesions "excision-biopsy" may be done.

Treatment

Ackerman and Regato⁴ state, "The treatment of carcinoma of the skin may be reduced to the choice between its destruction by means of radiations or its eradication by means of surgical excision. The choice of therapy depends mostly on the location of the tumor, its extension, and on the history of previous treatment."

Generally, the small early lesions can either be excised or treated by x-ray or radium after biopsy. For a somewhat larger lesion, the site may be of some importance in determining the type of therapy. In areas which tolerate radiation poorly, such as the scalp, or where bone and cartilage are not well protected, such as the dorsum of the hand, excision is preferable to radiation. In large lesions, the location and extent will determine the therapy. Recurrent lesions and those with metastases are usually best treated surgically.

Regardless of whether radiation or excision is used,

it is most important that: (1) A histologic diagnosis be obtained, (2) if radiation is used, an adequate dose be administered in the first course of treatment and (3) if surgical excision is employed, a generous margin be obtained on the first excision.

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TEN POINT PROGRAM OF THE SOUTH CAROLINA MEDICAL ASSOCIATION

1. Cooperation

To promote closer cooperation and better understanding between all agencies, groups and individuals concerned with providing and improving medical care for the people of South Carolina.

2. Extension of Medical Care

To study constantly the need and availability of medical care in each county of the State and in the State at large.

To promote plans for providing or improving medical care where is a need, particularly in the rural areas.

3. Pre-Paid Hospital and Medical Care

To make voluntary pre-paid hospital and sickness insurance available to all the people of the State (through Blue Cross, Blue Shield, and commercial insurance policies), and to promote the widespread purchase of such insurance.

4. Care of Indigent

To work with local county and state agencies, and with philanthropic organizations, toward securing good medical care for the indigent.

5. Public Health

To support the South Carolina State Board of Health in its broad program of preventing diseases and of safeguarding the health of our people.

6. Health Councils

To support the State Health Council in its announced program. To sponsor

the formation of a County Health Council in every county of the state, and to encourage our members to support and to work with these organizations.

7. Hospitals

To promote the expansion of present hospital facilities and the building of new hospitals—where there is a definite need.

To strive for highest standards of professional care in the hospitals in the State.

8. Medical Colleges

To support the Medical College of the State of South Carolina and to bend our efforts toward keeping its standards of education on a par with other medical colleges throughout the country.

To promote good nursing education and good nursing care throughout the State.

9. Education of the Public

To acquaint the citizens of the State with regard to the problems of medical care in existence today, to inform them as to what is being done to solve these problems, and to advise with them as to further plans for securing better health and better medical care for the people of South Carolina.

10. Political Medicine

To prevent political control or domination of medical practice or of medical education.

1951 DUES

ARE NOW PAYABLE

South Carolina Medical Association -----\$20.00

American Medical Association -----\$25.00

These should be paid through the county medical society treasurer. Help him out by sending him a check right away.

Those who have not paid their 1950 A.M.A. dues should do so before February 1 or their names will be dropped from the membership roll. A physician who loses his membership through failure to pay dues will be declared in arrears and will have to pay these dues in addition to his regular dues should he want to rejoin the Association.

J. Howard Stokes, M.D.
Treasurer

The Journal of the South Carolina Medical Association

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Florence, S. C.

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8½ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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 JANUARY, 1951

NEW YEAR RESOLUTIONS

Might we suggest the following resolutions for our Association for the coming year—the objectives which should be placed on our *must* list for the immediate future:

To promote the formation of a state-wide Grievance Committee.

To submit to the Governor and the General Assembly a comprehensive, state-wide plan for the care of the medically indigent.

To promote actively the purchase of voluntary health insurance, particularly contracts with Blue Cross and Blue Shield.

To cooperate actively with those organizations, state and local, which are concerned with bettering the general welfare of our people.

To support and participate in the activities of the American Medical Association.

To accept our responsibility and to render our service to our country in its all out struggle against communism.

RESOLUTION

The following Resolution was adopted by a Committee of the Committee on Military Affairs of the South Carolina Medical Association:

WHEREAS—GOD IN HIS INFINITE WISDOM
HAS SEEN FIT TO CALL
ONE OF HIS MOST FAITHFUL SERVANTS,
LAWSON PAUL BARNES, AND
WHEREAS DR. LAWSON PAUL BARNES
DURING HIS LIFETIME
EXEMPLIFIED SERVICE TO MANKIND
IN

CURING THE SICK—
COMFORTING THE AFFLICTED—
ENCOURAGING THE DESPONDENT—
SERVING HIS COUNTRY IN THE ARMED
FORCES IN TIME OF WAR—
LENDING HIS SOUND JUDGMENT AND UN-
BIASED OPINIONS TO THE COUNCILS OF
MEN—
AND IN REVERING HIS GOD:

THEREFORE—WE THE SOUTH CAROLINA ADVISORY COMMITTEE TO SELECTIVE SERVICE ON DOCTORS, DENTIST AND ALLIED SPECIALIST DO HEREBY DEPLORE THE PASSING OF ONE OF OUR MEMBERS LAWSON PAUL BARNES, AND DO EXPRESS TO HIS WIFE AND FAMILY OUR SINCERE SYMPATHY IN THEIR GRIEF AND WE JOIN WITH THEM IN THEIR MOURNING.

WATTS HOSPITAL SYMPOSIUM

The Eighth Annual Watts Hospital Medical and Surgical Symposium will be held at the Carolina Theater, Durham, N. C. on Wednesday and Thursday, February 14 and 15, 1951. An outstanding program has been arranged and will include two days of papers, a clinico-pathological conference and two panel discussions—one on Headache, and one on Respiratory Infections. A distinguished group of speakers will appear on the program. Detailed information may be secured from Dr. J. W. Woods, 410 One Eleven Corcoran St., Durham, N. C.

THE A.M.A. MEETING IN CLEVELAND

(A Travelogue)

December 1.

Three hours, by bus, from Florence to Charlotte; two hours, by plane, from Charlotte to Cleveland—that's traveling. Arrived in Cleveland in the afternoon to find several inches of snow covering the ground. Main streets cleared, side streets with enough clearance for one way traffic. Banks of snow along edge of streets and sidewalks. Temperature 25 degrees. Most cars still in garages although large number on the go. Traffic slow. Crowds of people waiting for street cars and busses. High school just opened today, primary grades still staying at home. Bulldozers pushing snow here and there. Men shoveling snow, boy pulling load of groceries on a sled. Such was the picture of Cleveland five days after its worst snowstorm in history.

After checking in at the Hotel Statler and parking my suitcases in the room, went down to the lobby to look around. Ran into Larry Rember, Director of Public Relations at the A.M.A., and went to supper with him. Larry had paid us a visit recently in South

Carolina. We had a delightful time discussing things in general and public relations in particular. Larry is doing a fine job but one that is not known to many. But that is true of any job in public relations. The private conversations, the personal contacts here and there, the furnishing of pertinent information to this or that group, the talks to small and large gatherings—these are the things which play such a large part in helping to interpret our profession and to publicize our work and objectives—and these are the very things which do not make headlines.

December 2.

Spent the morning meeting old friends and taking things easy. After lunch at a nearby restaurant where I saw the first quarter of the Army-Navy game on television, I joined the other members of the Legislative Committee for a joint meeting with the Executive Committee of the Board of Trustees. Also sitting in for the general discussion were the Chairman and Secretary of the Council on Medical Education and Hospitals, and Klem Whitaker and Leone Baxter. The purpose of the meeting was to discuss the types of legislation which might be introduced in Congress and the attitude which the A.M.A. should adopt toward them. Most of the three and a half hour session was spent in a discussion of the position which the A.M.A. should take with regard to the federal aid to medical education. Everyone in the room was asked to have his say and there was certainly plenty of live discussion and plenty of divergence of opinion. Is there a real need for financial aid to medical schools at the present time, and if so, how much? Could the financial aid be secured from other sources or would it have to come from the federal government? Would we be inconsistent in opposing federal subsidies in one field while we appear to approve of them in other fields? Is federal aid to medical education inevitable and would we be doomed to defeat if we oppose it? Is there a real shortage of physicians which calls for an increase in the number of M.D.'s being graduated each year?

Toward the end of the session one member of the group remarked that he felt like the man recently returned from Washington who said that he had finally joined the OGMK club. "O, Gee, Am I Konfused. And," he added, "everybody in Washington is so confused that they even spell confused with a K."

We finally came to certain non-unanimous conclusions and these were submitted to the Board of Trustees which in turn will present them to the House of Delegates.

One of the group, Willis Huron of Michigan, had a guest card to the Union Club of Cleveland and invited some of the group to go with him for dinner. It is an old historic club built by a group of iron-mongers, and reflects the austerity of earlier days. In the party were Elmer Henderson, President of the A.M.A., John Cline, President-Elect, Louis Bauer, Chairman of the Board, Dwight Murray of California, Bing Blasingame of Texas, Tom Murdock of Conn., Gunner Gunderson of Wisconsin, Huron and myself. I was out of my element in this bunch of "big shots" but thoroughly enjoyed it. John Cline is coming down to speak to the Columbia and Greenville societies in February and has promised to come a couple of days early for some bird hunting around Florence. I just hope we can round up more coveys than I did the last time I went out.

December 3.

Awakened to the ring of the phone and Buck Pressly's voice, reminding me of our date for breakfast. Buck is making a real place for himself in the A.M.A., not only because of his genial personality

which wins him a host of friends, but because of the capable way in which he represents the general practitioner's point of view on the Council on Medical Education and Hospitals.

After breakfast I had quite a chat with Frank Dickinson, head of the Bureau of Economics of the A.M.A. He has done much, through his studies, to clear up many false ideas which prevailed in the public mind and to show the progress which the medical profession has made in promoting the health of the people. He has recently made studies on maternal mortality rates and is impressed with the great strides which some of the southern states have made. Although our rates are still higher than the national average, because of the high percentage of colored population, our relative progress has been outstanding. He knows of the work done by our committees on Maternal Welfare (first under the chairmanship of Bob Siebel, and now under Decherd Guess) and he would like to get a feature story in one of the big magazines on the subject. It certainly is a story worth the telling and one that the public should know, and I hope we can get it told.

The Public Relations Conference got off to a start with a luncheon at which John Cline was the main speaker. The afternoon session was devoted to a discussion of the "Groundwork for a Successful Public Relations Program." I had planned to attend but when Donald Koonce of Wilmington, N. C. suggested that we go to the Cleveland Browns—Philadelphia Eagles professional football game, the temptation was too great. So along with 38,000 other partially demented individuals we watched the hard fought game in a cold drizzle. Got back from the game in time to welcome my roommate, Walter Mead, who had just come in from Florence, along with Jack Meadors.

The evening session of the conference was featured by an address by Mr. Louis B. Seltzer, editor of the Cleveland Press. One of the outstanding men in the newspaper field, Mr. Seltzer has been noted for his ability to see the needs of a community and the nation as a whole and not merely through the eyes of a particular group. He spoke on the general subject of "What a Community Expects of the Medical Profession." We hope to publish, in this Journal, part or all of his speech when it is available. Here are some of his thoughts—the people have been educated to want the best that medicine has to offer . . . health is not only a personal matter, it is also a national asset or liability . . . the costs of medical care are too high . . . ninety percent of the medical profession are highly ethical and conscientious and they cannot afford to protect or condone that small percent who, through excessive charges, refusal to see patients, refusal to pay night calls, etc., are bringing criticism of the profession . . . the formation of grievance committees has been a most progressive step . . . medical care is not the exclusive concern of the M.D. . . . if you get into politics, and you have already done so, do not confine your activities to medical affairs . . . don't be just a pressure group . . . the community expects so much of the doctor because it thinks so much of him.

December 4.

The morning was spent in the Public Relations Conference where the various activities which district and county societies could undertake, were discussed. The afternoon was devoted to another long session of the Legislative Committee. This committee, composed of nine men each representing a different section of the country, is supposed to serve as a liaison between the central office of the A.M.A., the Washington office of the A.M.A., and the various state medical societies. It is our function to get to the states, as

quickly as possible, information relative to proposed legislation in the Congress which deals with medical affairs, and also to get in return the reaction of the men back in the states toward policies which the A.M.A. should adopt with regard to the legislation. A large part of our time was spent in working out the details of our method of operation.

December 5.

Had breakfast with Hugh Smith, Buck Pressly, and Walter Mead. Hugh had come up the night before.

The House of Delegates was called to order at 10 A. M., with 193 out of a possible 197 delegates present—an excellent record. The morning and part of the afternoon was spent in hearing the reports of the officers, the Councils, and the introduction of resolutions.

Decherd Guess, following last June's session of the A.M.A., gave an excellent account, printed in this Journal, of the modus operandi of the House of Delegates with its Reference Committees, etc., so I will not repeat here. It was my luck to be appointed chairman of the Reference Committee on Amendments to the Constitution and By-Laws, and we had a number of resolutions referred to us.

During the evening Walter Mead and I, representing our Journal, attended a dinner sponsored by the State Journal Advertising Bureau—the Bureau which secures national medical advertising for state medical journals. (If anyone has read this far, ask me the next time you see me to tell you the story about "un-gah").

December 6.

The House of Delegates was called into special session at 9 A. M. Dr. Louis Bauer, Chairman of the Board of Trustees, announced that the A.M.A. was giving \$500,000 from its Educational Campaign Fund to medical schools to help them in their present financial crisis. It is estimated that medical schools need about ten million dollars to meet their needs for the coming year. How much better it would be for this money to come from private sources rather than from the federal treasury—with the regulations and directives which would surely follow. It is hoped that this gift from the A.M.A. will set in motion a chain reaction amongst doctors, industrialists, philanthropic organizations, etc. which will raise the desired amount. The announcement was greeted with loud applause and the action of the Board was approved unanimously.

The rest of the morning was spent in hearing before our Reference Committee. Several proposed amendments were of general interest and we had about thirty present with most of them voicing their views. Two proposals which evoked considerable discussion were: making the President and President-Elect voting members of the Board of Trustees, and making Past-Presidents voting members of the House of Delegates for five years after their tenure of office. (Neither of these passed).

Following luncheon, our committee went into executive session, discussed the various proposals in the light of the arguments presented, and reached our conclusions and recommendations. These were then drafted and given to a secretary for typing.

The evening was spent at the party given by the Aces and Deuces. For years, those delegates from states which have only one or two delegates have felt embarrassed by the hospitality received at the hands of the larger delegations. The delegates from the larger state associations (i. e. N. Y., Penn., Cal.,) are constantly giving cocktail parties and buffet luncheons to which many of us are invited. For one

or two delegates to return in kind would be financially back-breaking. So last June all of the one and two delegate groups got together and decided to pool our resources and give a real party for everybody.

We called ourselves the Aces and Deuces and sent out invitations to around 225. Wearing red carnations, we met them at the door and tried to be gracious hosts. It must have been a good party for almost 400 came, we had to send out for more refreshments, and finally had to dim the lights in the big ballroom to suggest that it was time to leave.

December 7.

The final session of the House of Delegates was held this morning. The Reference Committees all submitted their reports. Space will not allow for a resume of all the business transacted and I would certainly urge at least a cursory perusal of the printed minutes of the meeting which will appear soon in the Journal of the A. M. A.

The problem of federal aid to medical schools was to the fore and it was agreed that the medical schools need financial help but that every effort toward securing such aid from private sources should be exhausted before federal aid was sought, and that federal aid, should it come, should be so handled that there could be no interference of government in the policies and activities of the school.

The question of membership in the A. M. A. was settled as follows: all members of state medical societies are members of the A. M. A. in 1950 and as such are supposed to pay \$25.00 dues. They will receive the Jour. A. M. A. beginning Jan. 1 1951. If the dues, however, are not paid by Jan. 1, 1951, a statement will be sent from the Secretary of the A. M. A. to acquaint them with the fact. If the dues for 1950 are then not paid by Feb. 1, 1951, the men will be dropped from the rolls of A. M. A. membership and declared in arrears. Should these men wish to join the A. M. A. later they must pay for the one year's dues (\$25.00) which they are in arrears plus the regular dues for the year in which they join. Those who have already paid their dues for 1950 will, of course, have nothing to worry about.

Furthermore, the number of delegates which a state will have in the House of Delegates of the A. M. A. will be one per thousand or fraction thereof of A. M. A. dues paying members in that state. Whether South Carolina will have 2 delegates in the House of Delegates in 1952 will depend upon the number of our membership who pay A. M. A. dues in 1951. At the present writing slightly over 900 of our membership of over 1100 had paid, and if this prevails next year we will be cut down to one delegate.

The afternoon was spent at a joint meeting of the House of Delegates and the 3rd Annual Conference of the National Educational Campaign. The highlight of the session was an address from William L. Hutcherson, General Chairman of the United Brotherhood of Carpenters and Joiners of America, and Vice-President of the American Federation of Labor. This address, Socialized Medicine is No Bargain, was broadcast over a national radio hookup, was published in the December 9 issue of the J. A. M. A., and is to be found in the Ten Point Program Section of this issue of our Journal. This is the first time that an outstanding labor leader has come out strongly against socialized medicine and the speech bears careful reading.

December 8.

By plane to Charlotte, by bus to Florence—to find work piled up and waiting to be done.

NEWS FROM WASHINGTON

LARGER ARMED FORCES, NEW CALL FOR PHYSICIANS IN SIGHT. Unless there is an about-face in military planning, substantial numbers of physicians not now anticipating military duty will have to be called up in the next year. Although military medical planners have made no announcement of new requirements, some facts are inescapably clear.

Between July 1 and December total military manpower was increased from 1,500,000 to about 2,200,000. Until the new Korean crisis, the goal was 2,800,000 by next July 1. Physicians to care for the additional men were expected to come mainly from doctor-draft registrants classified 1-A and 1-A-O, and reserves who otherwise would be so classified. However, the services now plan to speed up inductions and reach the 2,800,000 total by early spring. This means that the present pool of 1-A's and 1-A-O's and draft-eligible reserves will be used up earlier than anticipated. After that, the services will have to call on physicians not now classified 1-A or 1-A-O and possibly again reach into the ranks of reserves with World War II experience.

In his request to Congress for additional defense money, President Truman did not specify a new manpower total, but he left no doubt that a figure higher than the current goal of 2,800,000 would be set. Mr. Truman said: "We now face the necessity of having to raise our sights both in terms of manpower and in terms of production."

It should be remembered that last fall the services' request for a 3,500,000 ceiling was not approved. If, in view of the new crisis they should get authorization for this total, *several thousand additional physicians would be needed.* Officially, military leaders decline to set a troop ratio for physicians, but unofficially some of them agree that four per thousand would not be too far from the actual figure. Against a 700,000 increase in troop strength, *This would mean almost 3,000 additional medical officers.*

NEW CDA TAKES OVER MEDICAL DEFENSE PLANNING. Medical and other phases of civil defense planning have been shifted from National Security Resources Board to the new *Civil Defense Administration*, which President Truman created by executive order. Extent of CDA's power at present is not clear, but legislation giving the agency unprecedented authority is pending in Congress. (The first bill on the subject, S.4162, was reviewed in CAPITOL CLINIC NO. 36.) Purpose of CDA is to knit together regional and local civil defense organizations and to give the federal government the right to use a strong hand if other organizations are unable to act in a disaster. Its medical program calls for establishment of regional medical offices and stockpiling medical supplies. Mr. Truman appointed Millard F. Caldwell, Jr., as director of CDA and said it would be financed with emergency funds pending action by Congress. Mr. Caldwell is a former governor of Florida and a former Congressman.

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

HALF MILLION FOR MEDICAL EDUCATION

The most significant event at the interim session of the AMA House of Delegates was the announcement of the action by the Board of Trustees in appropriating \$500,000 for the aid of medical schools. On the morning of December 6th at a brief special meeting of the House of Delegates, Dr. Louis Bauer, Chairman, announced that the Board had decided unanimously on this step. The amount is to be the nucleus of a fund which, it is expected, will be augmented by gifts from other sources, for this pressing need.

Within the past year the problem of providing expansion and improvement of facilities for educating and training more physicians has begun to plague the profession perhaps more than any other. One of the chief criticisms which the "Compulsioners" have been raising is that there are too few doctors and that the medical profession is in large part responsible. In fact, and unfortunately, a substantial number of honest, fair-minded, but mis-

informed people generally have the same mistaken idea. This resulted in the effort which has been made to drive through Congress a bill to provide Federal aid to Medical Education, with all the inevitable Federal control which would be involved.

The action of the A. M. A. in putting its own money on the line, to the tune of half a million dollars, followed by steady, earnest and continued effort on the part of its officers, members and component societies, to increase the fund to the full amount necessary for required assistance to medical schools, will answer the argument and the criticism more effectively than anything and everything that might have been said.

"SOCIALIZED MEDICINE IS NO BARGAIN"

William L. Hutcheson

(Mr. Hutcheson is General President, United Brotherhood of Carpenters & Joiners of America and Vice President of the American Federation of Labor. His address, which is here printed in full, was pre-

pared for delivery at a Joint Session of the House of Delegates of the American Medical Association and the Third Annual Conference of the A. M. A. National Education Campaign, Cleveland, Ohio, December 7, 1950. Mr. Hutcherson, due to illness, authorized the reading of his address to the Convention by his assistant, Mr. Peter E. Terzick, Editor of "The Carpenter.")

I am against socialized medicine. So is the organization which I have the honor of heading. At the Twenty-Sixth General Convention of the United Brotherhood of Carpenters and Joiners of America, held in Cincinnati last September 1, 300 delegates, representing better than 54 per cent of the total membership, voted down a resolution to support the National Health Program. This probably does not jibe with the feelings of a good deal of the rest of the labor movement because much of the pressure for "free" medical care is coming from labor organizations. But it does reflect my sentiments and the sentiments of our recent convention.

Saving a dollar had never been distasteful to me. In fact I like to get as much for my money as the next man. That is one of the reasons why I oppose socialized medicine. It is no bargain. It looks cheap the way the backers present it, but when you dig down under the fancy layer of propaganda frosting you find that it can be mighty expensive. The British people have already discovered this fact. The July issue of International Labour Office, contains some very interesting data on the operation of the National Health Service in Britain. I quote a few lines of that report:

"The total (gross) cost of the National Health Service in 1948-1949, the first year of operation, greatly exceeded the original estimate. This was 265 million pounds, as against a revised estimate of 368 million pounds, with a net cost to the taxpayer of 278 million pounds. The revised estimate for the year 1949-1950 was 450 million pounds as against an original estimate of 352 million pounds. For the 1950-1951, the cost is estimated at 484 million pounds; in 1946 when the Bill was passed, the service was believed to cost 167 million pounds a year.

In case you don't understand what the International Labour Office is, I can best explain its functions by quoting a bit from its preamble:

"The International Labour Office is an association of nations, financed by Governments and democratically controlled by representatives of Governments, of management and of Labour organizations.

"Its purpose is to promote social justice in all countries of the world. To this end it collects facts about labour and social conditions, formulates minimum international standards, and supervises their national application."

The I. L. O.'s publication, "International Labour Review," is published in the United Kingdom. As an international organization, I. L. O.'s findings are supposed to be strictly impartial.

Getting back to the report; if I read it correctly, service that was supposed to cost 167 million pounds per year when the plan was set up in 1946 costs 484 million pounds per year, and the end is not yet in sight. By my old-fashioned kind of arithmetic that is an increase of better than 345 per cent and I am sure my poor old mother, who always made a dime to work for a quarter, would not consider that kind of proposition any bargain.

I know! I know! The socialists claim that money is of no consequence in the matter of national health; —getting the poor the same quality and quantity of medical care as the rich can get under private enterprise is the advertised objective of the National Health Program. That sounds fine, too; but on Page 57 of the I. L. O. report, I find the following sentences:

"Survey of the distribution of doctors by boroughs shows that certain wealthier districts (of London) have an average of one doctor for 1,261 patients, while in the inner East End there are 2,472, or twice as many patients, per doctor. For a group of southern boroughs, the average is 2,897."

If that isn't the "one house and one rabbit" recipe transferred from the meat pie maker's kitchen to the National Health program, then I need new reading glasses. I have tried to figure it from all angles but the answer I always come up with is that lumbago, shingles and bellyaches of London's South Siders get only half the attention that similar ailments get in the swankier districts. For all the planning that has been done, there is still an uneven distribution of doctors in London. If the backers of the National Health Program are to achieve their objective of equal health protection for all, the next step must be to tell doctors when and where and how they are to practice. Therein lies my greatest fear of socialization.

Socialization and death have one thing in common; you cannot be either a little bit socialized or a little bit dead. It is whole hog or nothing. After two years of the National Health Program, London doctors still have preferences as to where they want to practice. By compulsion of one kind or another, somebody is going to have to shoo doctors away from the fancy neighborhoods into the tenement districts or the program will wind up where it started. When the government is given authority to tell one group or one profession where and how its members are to work, no other group or profession can be safe for long.

If the day ever comes to America when Uncle Sam usurps the power to dictate to doctors under a health plan, it will be a sad day for carpenters. Adequate housing is still an unsolved problem in this country, especially for the poor. If it's logical to nationalize the medical profession to get more medical service for the poor, it is equally logical to nationalize the home construction industry to get roofs over the heads of the lower income groups.



a. Ulcerative amebiasis during Diodoquin therapy. In this patient with severe hemorrhage, edema and necrosis, the ulcers show healing, with many scabs. No active lesions are seen.



Photographs courtesy of Louis H. Block, M. D., Chicago

b. Three months later, after continuing Diodoquin therapy, extensive scarring indicates healing. Inflammation is further reduced and only superficial areas of inflammation remain.

AMEBIASIS: "Diodoquin is probably the least toxic of the drugs and contains the most iodine."¹ "Diodoquin now appears to us to be the drug of choice [for outpatients] because of its effectiveness and because it is tolerated well by most patients."²

In acute or latent forms of amebiasis, Diodoquin® (diiodohydroxyquinoline) the potent amebicide, may be administered in large dosage over prolonged periods. Diodoquin contains 63.9 per cent of iodine... is tasteless... relatively nontoxic... orally administered.



1. Johnson, S. K.: Mississippi Doctor 27:69 (July) 1949.

2. Merritt, W.: J. Florida M. A. 35:351 (Dec.) 1948.

I do not know much about doctors, but I know quite a bit about carpenters. They are an independent lot. They want to work where and how they please. The first bureaucrat who told a carpenter he had to work in Little Rock when he wanted to work in Lancaster would be gumming his food for lack of teeth. Carpenters want to be free agents; free to work where they want; free to negotiate the terms of their wages and working conditions through collective bargaining; yes, even free to leave the industry and try their luck at something else if the spirit moves them.

They will retain these freedoms only so long as all other groups retain theirs. Socialization is like a wolf with a tapeworm; once it starts gnawing, it never can stop. Socialized medicine would only be the first bit of our free enterprise system; it would not be many years before the carpenters would be feeling the teeth of socialization on the seats of their overalls. Any way you look at it, socialized medicine is no bargain and the carpenters want none of it.

I know the backers of the national health plan in this country resent the term "socialized medicine." They have all sorts of arguments to "prove" that doctors and patients will remain free as the air under their program. They make a strong case. Perhaps if human nature were less ornery and less avaricious, an idealistic health program might work out all right. But so long as people have preferences, so long as Park Avenue has more appeal than Hell's Kitchen, there will be an uneven distribution of doctors under any plan that does not contain compulsion. And once compulsion enters the picture, the rights and freedoms of all citizens stand in jeopardy. To me, it is as simple as that. For forty years, I have fought communism tooth and toenail because I do not want anyone pushing me around. I certainly do not want to put my head into a socialization noose voluntarily when the results can be as undersirable as communism.

I have always respected the medical profession for the fine contribution American medicine has made to human welfare. As I watched your battle against regimentation during the past two years, I have added to that respect. The physicians of this country have shown that they are willing to fight for their conviction. I salute you today not only as doctors but as crusading citizens as well. We in the labor movement have our own cross of regimentation to bear. The fight you are making is part of the same war. It is a war against concentration of authority in a few hands in Washington. As a veteran of forty years in the labor movement, I know what it is to fight for human rights. I am happy to take my stand beside you.

MEDICAL PR CONFERENCE TAKES UP COUNTY PROBLEMS

Getting down to the "brass tacks" of medical public relations, more than 350 medical PR leaders de-

voted their Third Annual Medical Public Relations Conference to "Effective County Society PR."

In a sound diagnosis of PR problems, the conferees—many of them practicing physicians—concluded that their problems can only be solved by the individual doctor in his dealings with his patients and through his active participation in the work of his local medical society.

The two-day conference, held December 3 and 4 in Cleveland's Hotel Statler, just prior to the Clinical Session of the American Medical Association, is a service of the A. M. A.'s public relations department, directed by Lawrence W. Rember, Chicago.

Work sessions took up "Groundwork for a Successful PR Program," "County Societies and the Legislative Scene," "Activities with a Purpose," and "Medical Public Relations in Small, Medium and Large Communities." Outstanding public relations leaders from medical societies across the nation contributed their ideas to the conference, the success of which was indicated by a registration nearly double that anticipated.

The conference got under way with a noon luncheon at which Dr. John W. Cline of San Francisco, president-elect of the A. M. A., gave the keynote address. Dr. Cline was introduced by Dr. George F. Lull of Chicago, secretary and general manager of the A. M. A., who was toastmaster.

Dr. Cline advised doctors that to build good public relations "medicine must first give good medical care and next provide an opportunity for enrollment in voluntary health insurance plans." He said, "some doctors fail to realize the defects of their own practices and must be educated to them."

One of the highlights of the conference was the annual banquet at which Louis B. Seltzer, editor of the Cleveland Press, told doctors "what the community expects of the medical profession."

"The American public is health conscious as never before," Seltzer said. "Being aware of the best in medicine, the public naturally wants it. I do not think anyone will regard this as unreasonable."

Health, continued Seltzer, is more than a personal matter. It is a national asset upon which our national security depends.

"The public has so high a regard, so sincere a veneration for the honest and competent physician that you cannot afford to protect the doctor who is not faithful to his vows and to the highest ideals of his profession," Seltzer stated.

Seltzer congratulated doctors on setting up grievance committees to handle complaints involving doctor-patient relationships and urged closer relations of the press and the medical profession to tell the doctors' story to the public.

when "eating
for two"

... plenty of
citrus fruits

Most obstetricians today insist that their mothers ingest plenty of vitamin C, particularly after the first trimester¹ (8 oz. citrus juice during pregnancy, 12 oz. while lactating).⁶ Pregnancy is thus made safer because toxemia is thereby reduced.⁷ Also, more babies are born normally and with a higher birth weight, while premature and still births are fewer.^{3,4} In addition, both maternal and infant health is improved postpartum when an adequate vitamin C regimen has been followed throughout pregnancy.² Most mothers enjoy the flavor of fresh Florida citrus fruits (so rich in vitamin C and containing other nutrients*), as well as the energy pick-up provided by their easily assimilable fruit sugars.⁵

*Citrus fruits—among the richest known sources of vitamin C—also contain vitamins A and B, readily assimilable natural fruit sugars, and other factors, such as iron, calcium, citrates and citric acid.

FLORIDA CITRUS COMMISSION
LAKELAND, FLORIDA

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FLORIDA
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Dr. Louis H. Bauer, Hempstead, N. Y., chairman of the A. M. A. Board of Trustees, was toastmaster at the banquet. He pointed out, "The thought of those active in the campaign against the socialization of medicine is not for the doctor but for the individuals who would suffer from it."

The president of the A. M. A., Dr. Elmer L. Henderson of Louisville, Ky., gave a "salute to county societies," at the banquet. Said Dr. Henderson:

"The quickest way to eliminate the threat of socialized medicine is to meet the people's need for adequate medical care at a price they can pay." Henderson commended county societies for developing positive public relations programs.

The first afternoon work session was entitled "Groundwork for a Successful PR Program." Chairman was Dr. Cleo M. Miller of Nashville, Tenn., president of the Nashville Academy of Medicine.

The subject of "Who Directs the Work" was discussed by Dr. Russell B. Roth of Erie, Pa., secretary of the Erie County Medical Society. Outlining the method his society used to promote action, Dr. Roth offered a recipe for effective PR: "Take one executive committee and stir well. Hold meetings in an atmosphere encouraging thoughtful discussions. Use a key, hard-hitting group to stimulate other committees."

"Who Pays the Bills?" was answered by Arthur Tiernan of Evansville, Ind., executive secretary of the Vanderburgh County Medical Society. Tiernan explained that his society supplements dues with a system of "token payments from township trustees and the county department of welfare for treatment of the hospitalized township and welfare cases." The idea, he said, grew out of a survey indicating that people in the community had no idea of what medical services were available.

"Building the Program" was discussed by Dr. Charles S. Lakeman, who told conferees, "You've got to know what it is you want to build; you've got to have a plan calling for good organization and co-operation of membership." Lakeman, of Rochester, N. Y., public relations chairman of the Monroe County Medical Society, said his society analyzed community medical needs, told people the truth about the needs and set about public-relations-wise to satisfy the needs.

"By enlisting our members to do more and more public relations we believe we have the answer through individual activity, the key to membership enlistment," Dr. R. B. Chrisman, Jr., secretary of the Dade County (Miami, Fla.,) Medical Society, said. He talked on the topic, "Enlisting the Membership." A discussion period followed the talks.

A showing of Louis de Rachemont's new documentary film, "Here's Health," with promotion comments

by Lawrence W. Rember, assistant to the general manager of the A. M. A., followed the work session.

The Monday morning session opened with a discussion of "County Societies and the Legislative Scene," chairmanned by Dr. Gunnar Gundersen of La Crosse, Wisc., chairman of the A. M. A. executive committee and a member of the board of trustees.

Dr. Dwight H. Murray of Napa, Calif., in discussing "The Legislative Committee and You," told medical PR conferees that they must "build good relationships at home with congressmen." Legislators, he said, want to know why, in terms of the welfare of our people, the medical profession takes its stand on issues. Dr. Murray is a member of the A. M. A. board of trustees and the chairman of the committee on legislation.

"What's Ahead in Washington" was outlined by Dr. Joseph S. Lawrence of Washington, D. C., director of the Washington office of the American Medical Association.

Doctors must be thoroughly convinced of what is wanted and be ready to support the necessary legislation, Dr. Lawrence said. He advised his audience to write congressmen, request copies of bills, and "let them know you're interested or disgruntled." Dr. Lawrence told conferees what to anticipate in legislation during the coming months.

The latter part of the morning was devoted to "Activities with a Purpose," reports on projects of medical societies which in actual test have proved effective. Chairman of the session was Rollen W. Waterson, Oakland, Calif., executive secretary of the Alameda County Medical Society.

Dr. Eugene A. Ockuly of Toledo, Ohio, president of the Toledo Academy of Medicine, talked on "A Family Doctor For Every Family," an activity involving his society's professional relations committee. "MDs have a rightful place in community health groups and must cooperate," said Dr. Fred Sternagel, chairman of the Iowa State Medical Society's committee on medical service and public relations. Dr. Sternagel told of his society's "Community Health Projects."

"The PR Approach to Business Methods" was the subject of Dr. E. L. Bernhart's report. Dr. Bernhart of Milwaukee, Wisc., president of the Medical Society of Milwaukee County, discussed the medical-economic activities of the Milwaukee society. The topic of "Working With Other Health Profession" was taken up by Dr. William Skipp of Youngstown, Ohio, chairman of Mahoning County's allied professions committee. Dr. Skipp outlined the makeup and functions of the committee in the political as well as social areas.

Dr. Carl F. Vohs of Clayton, Mo., president of Missouri Medical Service, discussed "Promoting Vol-



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Test tube and Dropper
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or bottle of 36 tablets (No. 2107)

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untary Health Insurance," asserting that provision of adequate medical care is a local problem and that "patients must understand" health insurance so that difficulties do not arise.

The timely subject of "The Doctor and Civilian Defense" was presented by Dr. Frederic B. Davies, Scranton, Pa., of the committee on emergency disaster medical service of Pennsylvania's state society. "You can't turn your back on civilian defense," Dr. Davies told conferees. He stressed that a special committee must be formed to map out plans for medical work in any kind of emergency.

A noon luncheon in the Grand Ballroom was highlighted by an address by Richard W. Mills, executive secretary of the Fond du Lac, Wisc., Association of Commerce. Mills, speaking on "What IS This American Way?" illustrated to his audience what communism and socialism are and how they are attempting to move into our American system.

Dr. F. F. Borzell, Philadelphia, speaker of the A. M. A. House of Delegates, was toastmaster at the luncheon.

Concluding session of the 1950 Medical Public Re-

lations Conference was "The Idea Exchange." All conferees assembled after luncheon to hear general remarks by Dr. C. A. Woodhouse of Pleasant Hill, Ohio, secretary-treasurer of the Miami County Medical Society. Then the group split into three discussion sections to take up problems of medical public relations in small, medium and large communities.

Dr. John E. McDonald of Tulsa, Okla., chaired the medium-sized community discussion. Dr. McDonald is public policy committee chairman of the Oklahoma State Medical Society. The president-elect of the Wayne County Medical Society, Dr. Arch Walls of Detroit, Mich., served as chairman for the large community group. Dr. Woodhouse was in charge of the section for small communities.

Later in the afternoon the three groups re-assembled to hear brief reports from each discussion chairman. In summarization, Dr. Woodhouse pointed out the overlapping problems of all communities. He said, "The large attendance is an indication of the value of this two-day conference. The problem of medicine engaging in social welfare activities can never be pushed behind the darkening curtain."

CORRESPONDENCE

Editor
Journal of South Carolina Medical Association
Florence, South Carolina
Dear Doctor:

I am writing to extend a cordial invitation to members of the South Carolina Medical Association to attend a two-day Sectional Meeting of the American College of Surgeons at Hot Springs, Virginia, on February 26 and 27. The Homestead will be headquarters for the meeting and requests for hotel accommodations should be directed to The Homestead in Hot Springs.

The program for this meeting will include new surgical motion pictures, a special program on trauma, a cancer symposium, and panels or papers on The Effect of Vasodilator Drugs on the Circulation of the Extremities, Chest Injuries, Fractures about the Ankle Joint, Neck Surgery, Peptic Ulcer, Cancer of the Tongue and Mouth, Cancer of the Cervix, Cancer of the Lung, Injuries to the Biliary Ducts, Ulcerative Colitis, Surgical Aspects of Acute Head Injuries, Rehabilitation of Severely Burned Patients by Plastic Surgery, Emergencies Arising During Operation, and Surgery of the Colon, Anus and Rectum.

A five-dollar registration fee will be required, except from Fellows and members of the Junior and Senior Candidate Groups of the College, and interns and residents, but we are confident that the physician or surgeon in practice will find the program worth many times the registration fee.

As Chairman of the Committee on Arrangements I can assure you that the Fellows of the College in Virginia will give full cooperation in assisting members of the South Carolina Medical Association to take full advantage of this excellent meeting if they will come to Hot Springs on February 26 and 27.

Sincerely yours,
Claude C. Coleman, M.D., F.A.C.S.
Chairman, Committee on Arrangements

DEATHS

FOREST LAFON CARPENTER

Dr. F. L. Carpenter, 71, died November 22, at the McLeod Infirmary in Florence, following a heart attack at his home in Latta.

Dr. Carpenter was born in Hustonville, Kentucky. He received his education at the University of Kentucky, Vanderbilt School of Medicine (class of 1904) and took graduate work in New York. He had practiced medicine in Latta for the past forty-six years.

Dr. Carpenter was a member of the American Medical Association, a charter member and twice president of the Pec Dec Medical Society, a member and many times president of the Dillon County Medical Society. He was also a Shriner. Dr. Carpenter served his community not only as a physician but, also, as a loyal and faithful citizen.

Dr. Carpenter is survived by his widow and one son, Dr. F. L. Carpenter, Jr., of Statesville, North Carolina.

JOSEPH ASBURY DILLARD

Dr. J. A. Dillard, 60, died suddenly at his home in Columbia on November 30.

A native of Greensboro, Georgia, Dr. Dillard was graduated from the Emory University School of Medicine. He interned at the Southern Pacific Hospital in Houston, Texas, and later served as an officer in the Medical Corps during World War I. He had practiced medicine in Columbia since 1920. Known to his friends and patients as "Dr. Joe," he had endeared himself to hundreds in the city and county.

Dr. Dillard is survived by his widow, one son and one daughter.



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**Proc. Soc. Exp. Biol. and Med.*, 1934, 32, 241-245; *N. Y. State Journ. Med.*, Vol. 35, 6-1-35, No. 11, 590-592;
Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; *Laryngoscope*, Jan. 1937, Vol. XLVII, No. 1, 58-60

NEWS ITEMS

Dr. J. Lloyd Mims has opened offices in Spartanburg for the practice of Dermatology. He has recently completed examinations of the American Board of Dermatology and Syphilology.

Dr. Asa M. Searborough of Greenville, was inducted as a Fellow of the American College of Surgeons, at the meeting of the College held in Boston in October.

Dr. Kenneth M. Lynch, Jr., has opened offices in Charleston for the practice of urology.

Dr. John A. Ritchie is now practicing psychiatry in Greenville.

The American College of Allergists will hold its seventh annual meeting at the Edgewater Beach Hotel, Chicago, Illinois, February 12-13-14, 1951. This year these will be section meetings: Psychosomatic aspects of allergic diseases, under the leadership of Harold Abramson, M.D. of New York; on Pediatrics, under Bret Ratner, M.D. of New York; on Allergies of the Nose and Throat, under George Shambaugh, M.D. of Chicago; on Allergic Diseases of the

Skin, under Rudolph Baer, M.D. of New York City; and the Allergic Aspects of Rheumatism and Arthritis, under George Rockwell, M.D. of Cincinnati, as well as a general session of the College when hay fever, asthma and the newer drugs will be discussed under the leadership of John Mitchell, M.D. of Columbus, Ohio, the President of the College.

This year the College is trying for the first time the experiment of offering its post collegiate instructional course on the three days just preceding its annual conclave. This course has been arranged with the thought in mind that 10% or more of all the patients in a physician's practice have an allergic component in their complaint. (The faculty consists of some 25 outstanding allergists.) The course is therefore an extremely practical one designed for any physician who wants to learn the basic principles of diagnosis and treatment of allergic individuals and techniques that are useful in the management of these patients. A fee of \$35.00 will be charged for the three-day course lasting through February 9-10-11. For further information and registration write Fred Wittich, M.D., Secretary-Treasurer, American College of Allergists, LaSalle Medical Building, Minneapolis, Minnesota.

WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. A. F. Burnside, Columbia, S. C.

Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.

MEDICAL PR

As in all organizations, success and progress depend upon continuity in effort. Within the past few years, we have earned a place for ourselves by proving to be an important ally and weapon for the medical profession in our State. We wish to continue to work effectively in the interest of free enterprise, American medicine, and the freedoms of the American way of life. We hope to accept the challenge of the American Medical Association to bring about better relations between the medical profession and the public. With the guidance and approval of our Advisory Committees, it is our ambition to so direct our interests and activities that the American people may become better informed of the functions and policies of the A.M.A. and its component state and county societies, that we may earn public understanding and acceptance.

All methods of procedure must necessarily vary as to community needs and interests; nevertheless, the main objectives are the same. The Korean war has made many changes, so we must be flexible and changeable. With the establishment of defense programs, we must be ready to help with wartime community health problems whenever possible.

We should cooperate with the presidents and program chairmen of other organizations in the promotion of desirable health programs, provide trained speakers on health. Do not forget, however, that we, as individuals, can do much to help in the splendid objectives of the Medical Auxiliary. Make new friends, join different organizations and become a key member of each. We can serve as a liaison between the medical profession and the public. Every doctor's wife

is needed as an auxiliary member, for as doctors' wives, we have a great obligation. Let us be Worthwhile Citizens!

Mrs. P. M. Temples
Public Relations Chairman.

CHICAGO CONFERENCE

The seventh conference of state presidents and presidents-elect of the Woman's Auxiliary to the American Medical Association was held on November 2 and 3 in the Hotel La Salle, Chicago, Ill. Mrs. Arthur A. Herold, president, opened the meeting, gave her report, and presented Mrs. Harold F. Wahlquist, president-elect, who presided over the conference. Only three states and Hawaii failed to have representation, and South Carolina was represented by both its president and president-elect.

Among the speakers of national prominence were: Dr. Earnest B. Howard, Assistant Secretary of the A.M.A.; Dr. George M. Lyons, Special Assistant of Atomic Medicine, Veterans Administration; Dr. W. W. Bauer, author of "Santa Claus, M.D., who spoke "Health Education Media for the Woman's Auxiliary;" Dr. Thomas G. Hull, whose subject was "Use of Exhibits and Motion pictures in Health Education;" Miss Leone Baxter and Mr. Clem Whitaker, directors of the National Education campaign of the A.M.A.

One of the most interesting and informative features of the conference was the form of panel discussion used on four major phases of Auxiliary work. The national chairmen acted as moderators, and the state presidents, who had been assigned topics beforehand, took part. The four panels arranged were on Organization with Mrs. Leo J. Schaefer as moderator, Public



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Relations with Mrs. Theodore E. Heinz as moderator, Legislation with Mrs. Edgar E. Quayle as moderator, and Today's Health with Mrs. Joseph W. Kelso as moderator. South Carolina was most ably represented on the Public Relations panel by our president, Mrs. Alfred F. Burnside, who spoke on our maternal welfare program of last year.

Another feature of the conference which afforded special pleasure to those attending was the Regional Breakfast. The national organization is divided into four regions with a vice-president from each. Quite naturally, we are in the Southern Region, and we are represented on the national board by the third vice-president, a most charming woman from Little Rock, Arkansas, Mrs. Mason G. Lawson. The informal discussion at this breakfast was particularly helpful because regional characteristics make the same problems.

Your president and president-elect feel that this conference is of the greatest significance, and we wish that every Auxiliary member could have attended.

Mrs. Kirby D. Shealy
President-elect

EDISTO AUXILIARY MEETING

Doctor's wives of the Edisto Medical Auxiliary, at their regular luncheon meeting Tuesday, October 17th, were reminded of their three-fold responsibility—to themselves, their doctor husbands and their community—in a talk given by Mrs. Alfred Burnside of Columbia, president of the state medical auxiliary.

Mrs. Burnside also listed plans for the year, including a reminder of the state convention at Myrtle Beach in May, the observance of Doctor's Day in March, an explanation of the state budget and a reminder to subscribe to the state bulletin containing auxiliary news. She also discussed the student loan fund, which two student nurses are now using.

The speaker was introduced by Mrs. Vance Brabham, program chairman. Also a special guest at the meeting was Mrs. Kirby Shealy of Columbia, president-elect of the state medical auxiliary.

Mrs. James Gressett conducted the business session before the luncheon, when the group pledged their support to all health projects of the country; a committee was appointed to plan entertainment in honor of the new nursing class; and members were urged to attend the cancer movie Tuesday night.

Two new members, Mrs. H. L. Tuten and Mrs. George Wyatt, were welcomed into the auxiliary. Nineteen regular members were present.

Prior to Mrs. Burnside's talk, a tempting luncheon was served. The u-shaped tables were decorated with coral vine and zinnias in matching shade. White gladioli in a silver pitcher were used on the mantel, and foliage was used at other points in the ballroom.

YORK COUNTY MEETING

Fourteen members were present for the November meeting of the York County Medical Auxiliary which was held at the Roek Hill Elk's Club. A Dutch luncheon was served.

After the roll call and the reading of the minutes of the last meeting reports from officers and committee chairmen were heard.

Mrs. Alton Brown, Nurse Recruitment chairman reported that the student nurses and personnel of the county hospital were very appreciative of the tickets given them to the Artist Concert Course at Winthrop College by the Auxiliary and had already enjoyed four concerts. She announced that plans were being made for a party for the student nurses Christmas and a shower of books for the library at the nurses home would be given.

THE ATLANTA GRADUATE MEDICAL ASSEMBLY

MUNICIPAL AUDITORIUM ANNEX

ATLANTA, GEORGIA

February 5, 6, 7, 1951

MONDAY—February 5

- 8:00 Registration
9:40 Dr. Fred W. Rankin: The Modern Management of Cancer of the Colon.
10:05 Dr. Sara M. Jordan: Cancer of the Stomach.
10:30 Dr. Waltman Walters: Cancer of the Stomach.
10:55 Dr. T. Leon Howard: Tumors of the Upper Urinary Tract.
11:20 Dr. Carleton B. Peirce: To be announced.
11:45 Dr. Waltman Walters: Surgery of the Biliary Tract.
12:10 Dr. George J. Thomas: Fire and Explosive Hazards in Hospitals.
Lunch.
2:00 Dr. John T. Godwin: Nevi and Melanoma.
2:25 Dr. Fred W. Rankin: Modern Trends in the Management of Cancer of the Rectum.
2:50 Dr. Grayson Carroll: Bacteriological Studies in Relation to Choice of Antibiotic Therapy.
Review of Exhibits.
3:35 Dr. F. William Sunderman: Laboratory Aids in the Management of the Surgical Patient.
4:00 Drs. Jordan, Rankin, Walters and Peirce: Symposium — Cancer of the Stomach and Bowel.
Dinner.
8:00 Dr. George Van S. Smith: Functional Bleeding of the Endometrium.
8:30 Dr. Winchell McK. Craig: The Importance of Intraspinal Lesions in General Diagnosis.
9:00 Dr. Sara M. Jordan: The Management of Peptic Ulcer.

TUESDAY—February 6

- 8:00 Dr. Warren W. Quillian: Care of the Premature Infant.
8:25 Dr. John Parks: Urinary Tract Infections in Pregnancy.
8:50 Dr. T. Leon Howard: Childhood Pathology of the Urinary Tract.
9:15 Dr. Grayson Carroll: The Clinical Treatment of Urinary Infection.
9:40 Dr. J. S. Speed: Minor Surgery of the Foot.
Review of Exhibits.
10:30 Dr. Richard B. Capps: The Diagnosis and Treatment of Chronic Hepatitis.
10:55 Dr. John T. Godwin: Radiocautographic Localization and Pathological Effects of Iodine 131.

- 11:20 Dr. Warren W. Quillian: Diarrhea in Children.
11:45 Drs. Jordan, Walters and Capps: Symposium: Jaundice.
Lunch.
2:00 Dr. George Van S. Smith: Office Gynecology.
2:25 Dr. John Parks: Placental Complications.
2:50 Dr. George J. Thomas: Obstetrical Analgesia and Anesthesia.
Review of Exhibits.
Dr. Carleton B. Peirce: X-ray Treatment of Breast Cancer.
4:00 Drs. Smith, Parks and Godwin: Symposium: Tumors of the Ovary
Reception.

WEDNESDAY—February 7

- 8:00 Dr. Irvine H. Page: Diagnosis and Treatment of Hypertension.
8:50 Dr. Winchell McK. Craig: The Relative Value of Surgery in the Treatment of Progressive Hypertension.
9:15 Dr. Walter Bauer: Rheumatoid Arthritis, a Systemic Disease.
Review of Exhibits.
10:30 Dr. Richard B. Capps: Diagnosis and Treatment of Amebiasis and Amebic Hepatitis.
10:55 Dr. F. William Sunderman: Some Clinical Aspects of Serum Electrolytes with Particular Reference to Sodium and Potassium.
11:20 Dr. Samuel Proger: Obesity and Heart Failure.
11:45 Drs. Craig, Page and Proger: Symposium: Hypertension.
Lunch.
2:00 Dr. John R. Mote: Newer Concepts Concerning the Role of the Adrenal Cortex in Health and Disease.
2:55 Dr. J. S. Speed: Surgery in Chronic Rheumatoid Arthritis.
Review of Exhibits.
3:35 Dr. Samuel Proger: Coronary Insufficiency.
4:00 Drs. Bauer, Speed, Proger and Mote: Symposium: ACTH.

If you would like us to make your hotel reservation, may we suggest that you send your \$15.00 registration fee, payable to THE ATLANTA GRADUATE MEDICAL ASSEMBLY, to Mrs. Stewart R. Roberts, 768 Juniper St., N.E., Atlanta, Georgia.

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Parasitic relapse occurred in this individual on the eleventh day after treatment, whereas in the remaining 21 subjects, the stools have remained negative to date."

Most, H., and Van Assendelft, F.:
Ann. New York Acad. Sc. 53:427 (Sept. 15) 1950.



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Dowling, H. F.; Lepper, M. H.; Caldwell, E. R., and Spies, H. W.:
Ann. New York Acad. Sc. 63:433 (Sept. 15) 1950.

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Mrs. W. C. Twitty reported that she had received four subscriptions to The Bulletin and Mrs. W. H. Williams reported on a drive for subscriptions to Today's Health.

Mrs. S. F. Strait reported on the executive board meeting that was held in Columbia in October. The Auxiliary voted to continue our project of nurse recruitment and to take over the sale of T. B. seals

in December.

The president, Mrs. Quantz, reported that the Auxiliary had been called on to help with the United Fund Drive. Five dollars was donated by the Auxiliary to the United Fund.

The Auxiliary heard a most interesting and informative paper on the family of Johns Hopkins given by Mrs. W. D. Rice.

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The Journal

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South Carolina Medical Association

VOLUME XLVII

February, 1951

NUMBER 2

PHYSICIAN KNOW THYSELF *

J. H. MEANS, M. D.**

If, as the poet tells us, "the proper study of mankind is man," then perhaps a proper study for doctor-kind is the doctor. It is because I believe this to be true that I have dared to paraphrase the words of St. Luke in my title. We doctors study our patients intensively, exhaustively, and perhaps, even exhaustingly, but how often do we study ourselves? How often do we pause to ask what makes us behave the way we do? How actually do we behave, or how does our behavior affect our patients or others? Not often enough, I venture to say.

The behavior of the doctor falls rather naturally into three categories—his behavior as individual physician toward his patient or other individuals in the professional relationship, his collective behavior, as when with his fellows he organizes to further some joint interest, and his behavior as a citizen and member of society. We may shorten these terms to professional behavior, political behavior and social behavior of the physician. I shall have some remarks to make on each of them, but chiefly on the first. There are, of course, two other categories of professional behavior of the physician, his behavior as teacher and as scientific investigator. I shall not discuss them at this time, although they are of great personal interest to me. They are not importantly within the scope of my present objective.

With regard to the doctor's behavior toward the patient, I shall draw first upon the wisdom of one of my great teachers—the late Lawrence J. Henderson—physician, chemist and philosopher, but also, on occasion, patient. In a scintillating address delivered to Harvard Medical students in 1934, Henderson began by pointing out that whereas mathematics, physics, chemistry and biology are nowadays successfully applied to the problems of medicine, science has made little if any contribution to the personal relations between physician and patient, and these have made no noteworthy improvement in a century. In the early

part of his scientific career Henderson had been deeply impressed by the concept of the generalized physico-chemical system formulated by the American physicist, Willard Gibbs. In later years he had been greatly intrigued with the social philosophy of the Italian sociologist, Pareto. The latter had described a generalized social system which Henderson found analogous, in some respects, to Gibbs' physico-chemical system. Both are made up of heterogeneous components, the interactions of which determine the nature of the system as a whole. The components in this physico-chemical system are molecules and ions; in the social system they are people of varied constitutions, reaction patterns, experience, and interests. From these generalities Henderson draws three conclusions which we may well find useful in the practice of medicine. They are as follows:

1. That "A physician and a patient make up a social system."
2. That "In any social system the sentiments and the interactions of the sentiments are likely to be the most important phenomena."
3. That "The physician should see to it that the patient's sentiments do not act upon his sentiments, and, above all, do not thereby modify his behavior, and he should endeavor to act upon the patient's sentiments according to a well considered plan."

The gist of all this, if I understand it aright, is that before he can truly know his patient the physician must truly know and understand himself. In the Hendersonian philosophy the word "sentiment" acquires great significance. Henderson refuses to define it, but gives instead concrete examples of what he means by it. Nor will I attempt a definition. I am sure we all can grasp the term's implication. In the case of ourselves we doubtless regard "sentiment" as synonymous with "conviction." In the case of others are we sometimes more likely to think of sentiments as prejudices?

It is customary to think of medicine as both a science and an art—whatever that means. Science is of recent origin; medicine is very ancient. It would

*Founders Day Address, Medical College of S. C., Charleston, S. C., Nov. 2, 1950.

**Jackson Professor of Clinical Medicine, Harvard University. Chief Medical Services, Mass. General Hospital.

seem then that it was long an art before it became a science. Dr. Ian Stevenson in *Harper's Magazine* for April, 1949, claims that medicine is not yet a science. His point is that "what makes a science is not the collection of facts, but the organization and generalization of those facts and the formulation and understanding of the general laws which govern them." Medicine, Stevenson believes, has not achieved this stature and will not "until the basic laws of health and disease have been disclosed. But the search for these laws," he continues, "has hardly begun. No discipline can claim a greater array of equipment by which its research is carried on, yet none is inferior to medicine in organizing its knowledge into coherent principles."

Stevenson may have overstated his case, but he has a point no doubt. Most of us will feel that medicine has at least some claim to being a science even in terms of Stevenson's definition, but hardly a first-class one. It all depends on what we include in the word "medicine." The so-called medical sciences are sciences without doubt, but are they medicine? Medicine also is an art, for its scientific knowledge must be applied and made useful. It is not a fine art, but art in the sense of a skill, or, insofar as it deals with the application of scientific fact, a technology. But the art of medicine long antedates the science. Before scientific medicine existed, medical art operated through the application of fetish, mystery—holy or unholy—and the practical aspects of common human experience. It still does so today, to some degree, perhaps more than we realize. The practitioner should seek to distinguish between the application of scientific knowledge with true detachment and the mere exercise of his art in accordance with his sentiments. More of the behavior of all humans is based on rationalization or on emotion than on reason, even that of the most intellectually gifted. If the physician knows this he can avoid certain pitfalls that otherwise might engulf him.

How shall the physician gain insight and true perception of his own motivation? The Freudians would doubtless answer—only by complete psychoanalysis. But it is obvious that every practitioner of medicine cannot undergo psychoanalysis, nor is it at all clear that it would be desirable if possible. I have thought for some years that it would be educationally valuable, and occasionally therapeutically valuable also, if some brief but soundly planned psychiatric survey were carried out on all first year medical students as a part of the regular curriculum. I believe students would learn much about themselves in this way which later would be valuable to them in practice, and those students with maladjustments might receive important help. There is, however, much sentimental objection to such a plan, and I have never made any progress in my own school toward getting it adopted.

If no help is given the medical student or young doctor in the understanding of his own personality by his teachers, then he can only gain such understanding for, and by, himself, through introspection and ex-

perience. He should be given the opportunity to learn the elementary principles of human psychology, and these he should continuously use in interpreting his own day-to-day behavior. He should frequently throughout his professional life ask himself, why did I do that, why did I say that? Am I being governed by professional jealousy, by self-interest, by ambition? Of course such self-scrutiny can never attain to complete objectivity. The individual may find that often he cannot answer these "whys." If so he should seek competent psychiatric guidance. No stigma need attach thereto. Or he may think he understands himself perfectly, when the truth is his understanding is quite faulty. The latter is the sort of case that the survey I have recommended might identify.

At this point we may revert to the third and last Hendersonian precept, which amounts to this: the doctor understanding his own motivation, sentiments, his likes and dislikes, will consciously refuse to allow the patient's sentiments to effect his own behavior, and he must make use of the patient's sentiments solely to promote his patient's welfare and for nothing else. The doctor is in the paradoxical position of needing to be both interested and disinterested at the same time. He must be interested in restoring the patient to health, but disinterested in his own relation to the case.

One of the most important elements in the pursuit of disinterestedness by the doctor is refraining, under all circumstances, from making any moral judgment of the patient, or at least of expressing any such, or allowing it to govern his action. There must be no argument about the patient's prejudices. No matter how revolting to the doctor the patient's sentiments may be, the doctor must consciously steel himself against being influenced in his behavior by them. Whenever any of my house staff or students tell me a patient is "uncooperative" I rebuke them. The word is tabu. It carries an inescapable implication of annoyance or irritation. God knows it may be true, but if true, it is a truth that the doctor must repress. If a doctor cannot do this in any given case he should retire from it and let another doctor take over. Religion sometimes makes mischief in the doctor-patient relationship. Doctors, like patients, may be adherents of any of the religious so-called orthodoxies, or they may be agnostics or atheists, or perhaps be totally unreligious. The doctor well may, insofar as he is able, seek to imitate the perfect humanity of Jesus, but never should he permit his religious beliefs to influence in any other way his dealings with the patient. The physician should not take over the function of minister, priest or moralist. On the other hand, he should facilitate in every way the ministrations of such persons when that is the desire of the patient.

In gaining an understanding of the patient's sentiments or motivations, a primary requisite is listening. I tell all my students that on taking a case they should first listen attentively to all the patient can or will tell them spontaneously. Such listening serves

two purposes. It informs the doctor and it comforts the patient, at least if the doctor's demeanor convinces the patient that he will make his best effort to be helpful. I try to convince my students that their first interview with a patient is an occasion of fundamental importance. Far from being merely one of history taking, it is rather the establishment of the doctor-patient relationship, the social system of Henderson. In accordance with how the doctor conducts himself the patient's confidence may be gained or lost. If gained, conditions become as favorable as possible for successful treatment. If lost, some other doctor had best take charge. Psychologists tell us that in the interview three elements are to be sought—what the patient tells, what he resists telling, and what he is unable to tell. The last requires some sort of analytic procedure to extract. All are important in the evaluation of the patient as an individual. Such evaluation of the whole patient the physician must attempt in order that he may treat him as a whole, and not simply in his parts. A good way to begin is for the doctor to try to imagine himself in the patient's predicament. This is helpful, but not enough. He must also try to picture himself not only in the patient's predicament, but in it and also with the patient's reaction pattern.

And this brings us to the matter of the placing of responsibility in the care of the patient. The complexities of modern medicine have brought about a state of affairs in which many doctors of different skills may be needed in the case of a single patient. It is because of this that group practice has developed. I am convinced that group practice, of one sort or another, is indispensable in modern society, if all the people are actually to get medical care as good as that which existing medical knowledge makes possible. A host of specialists are constantly in demand, nor can topnotch care be given without them. Yet the more specialized they become, the less are they competent to take responsibility for the care of the patient as a whole. Therein lies one of the great paradoxes and frustrations of modern medical practice, and every effort must be made to overcome it. The solution lies, I think, in bringing about a state of affairs in which, in every case, no matter under what circumstances medical service is being provided, some single physician must have final responsibility for the care of the patient as a whole. In other words, some one doctor must be in command, and remain so until he relinquishes it to another, either at his own desire or the patient's. When a general practitioner is in charge of a patient there need be no fuzziness about responsibility. The general practitioner is obviously in command of the whole situation. If he calls in consultants, then it is his responsibility whether to follow their advice or not. When, however, he sends the patient to a hospital for study, in which he has no ward privilege, then the hospital staff becomes responsible. The situation is not so clear, however, when a patient, as they often do, goes first to a specialist, let us say an ear, nose and throat man. What is the responsibility of the specialist under

such circumstances? My philosophy would be, under these circumstances, the specialist being a doctor of medicine, being the only doctor in the case, in spite of being a specialist, perhaps a rather narrow specialist, is still responsible, until he turns the case over to another, for the patient's total medical welfare. What actually happens, I suspect, in most such instances, is that the specialist goes sweetly along examining and caring for only part of the patient, unless some symptom or local sign suggests to him that more than local disease exists, then he calls for help. Because hidden disease may produce no symptoms, there is always some risk in caring for a local disease without proper study of the whole patient. The demands of adequate medical care are met when a physician capable of studying the patient as a whole is consulted first and does the necessary referring to specialists. I consider that I, as an internist, am competent to assume such responsibility, and I do assume it when a patient comes to me directly. Because I have a special interest in the thyroid within the broader field of internal medicine, patients are sent to me in consultation for an opinion on their thyroid status. Under such circumstances I regard my responsibility as that of a consultant only and send an advice to the referring doctor. His is the responsibility for the whole case, and he can follow my advice or not as he likes. If later he asks me to accept the patient for treatment, then I regard myself as responsible for the patient's entire medical welfare.

Responsibility for the patient's whole care in the milieu of a teaching clinic has been for many years a major concern of mine. The patient in the public wards of a teaching hospital has a considerable group of professional people caring for him in one way or another, fourth year medical students, interns, residents and visiting or attending staff physicians. Such a group will constitute either a mob or a well organized team with responsible leadership. In the medical service of the Massachusetts General Hospital I have told all visiting physicians assigned to ward duty that I hold them completely responsible for the welfare of all patients admitted to their wards. I tell the house staff and students that they are members of a team, and that each of them has the responsibility for performing to his best ability that portion of the patient's care which the team leader assigns to him. In some clinics the resident is given the final authority for the patient's care, and the visiting physicians play the role of consultants and teachers only. Such an arrangement works well enough, but we have always preferred the other.

You may regard these remarks on responsibility as old stuff, which it is, but I have reviewed the principles of responsibility because I have very frequently seen them lost sight of in actual practice. The best example of complete fuzziness of responsibility in medical care, a state of chaos in fact, often occurs in the case of the sick doctor, or doctor's wife. The doctor himself usually makes the world's worst patient.

because he often cannot refrain from trying to run his own case, and the doctor's wife runs into bad luck when her husband, and several of his friends, are all looking after her at once, with none of them assuming the responsibility of command or leadership.

At the beginning of this talk I tried to make the point that objectivity or detachment is an essential to good practice. Now no one can be detached or objective about himself when ill, and indeed he will have trouble enough trying to do so when well. Nor can a doctor act quite objectively about any person dear to, or dependent on him. When ill himself he should pick his physician and then obey his directions without hampering him with endless questions and arguments. Let him try to be a "good" patient. He can learn a lot by so doing. The subjective study of disease, that is to say, experiencing an illness, should be made a part of the medical curriculum. Nor in my opinion should any doctor act as physician to his wife or children so long as another is procurable, and preferably not to very close friends or relatives or employees. Toward none of such people can he be without bias. I have seen a number of cases in which doctors caring for either themselves or their wives have made confusion worse confounded. Everybody and nobody was caring for the patient!

Having established a good rapport with the patient and gained some understanding of his personality and situation, and having by appropriate examinations and studies achieved diagnoses both of the disease and of the patient, I hope I have said enough to make clear the significance of this differentiation—it then becomes necessary to plan and carry out treatment.

In regard to the treatment of the disease in contrast to the care of the patient. I would like to utter certain warnings. In planning treatment the doctor is sometimes led into temptation. He is tempted to use a certain therapeutic procedure because he has a special interest in it. A surgeon is inclined to operate if any possible reason for so doing can be found, or to rationalize in favor of surgery when he cannot discover any indications by sound logic. Indications for treatment must be arrived at detachedly—not by the rationalization of a doctor's desire. The degree of bias in favor of a pet method of treatment in the case of various specialists of course varies enormously. The noblest may be altogether free of it, but they are in a minority. It's a tough business when, in the case of a narrow specialist, some new medical discovery throws the treatment of a disease which has been largely paying the freight for him, into an area totally outside of his own discipline. He then may be faced with the alternative of seeing his practice wither, or taking time out for training in a new branch of medicine. Think of the harvests of tonsillectomies of bygone years. I know nose and throat men who, seeing the handwriting on the wall, are developing a way out by learning another type of surgery. Hard as such developments may be for the doctor, the welfare of

patients must always take precedence over the welfare of doctors.

The general practitioner or the internist, whom I still think of as also a general practitioner with limitations, is better able to choose therapies without bias. He is more free to pick from all the methods available the one with the greatest promise of relief to the patient's peculiar affliction. Of course even such a one cannot altogether escape temptation. He may be tempted to hold onto a patient and treat him by a medical procedure which he can give himself when a surgical one would be preferable. In the thyroid field in which I have worked for many years, I have seen remarkable changes in the treatment of Graves' disease. Prior to the introduction of iodine in 1923 we preferred x-ray therapy. Then we swung to subtotal thyroidectomy after preoperative iodine therapy. Indications were fairly clear up to that point, but now, with the advent of radio-active iodine and antithyroid drugs, we really have three types of treatment, all to some degree effective, none of them perfect, and at times it is a difficult job to choose between them.

Another hazard is the investigative urge. It is only through research that medicine makes progress, and there can be no argument about medical progress being essential to human welfare. But the first time a new treatment is used inevitably is an experiment. It can be said that the doctor should not experiment on his patient. The answer to that is, we have to experiment. But experimentation can be conducted so that the patient's welfare is safeguarded. The introduction of all the new wonder drugs was experimental, but such experiments should be conducted on humans only when there is a reasonable chance that the experimental therapy will give more benefit than any previously existing one. The practitioner should always regard critically the advice of inventors of new therapies. Being human they cannot avoid some bias in favor of their brain children. In other words, he must not accept new therapies solely on the evaluation of their discoverers. New forms of therapy are tried in the balance of practice by many physicians, and if they are good they survive; if they are found wanting, they eventually are abandoned. Or good forms of therapy give way to newer and better ones. Recall how sulfa drugs were supplanted by antibiotics in the treatment of pneumonia, for treatments come and treatments go but the art goes on forever! Each doctor with his wits about him, who plays a part in this continual process of mass evaluation of therapeutic procedures, does better by his patients, and gets more happiness out of his professional work, than he who tags along in the wake of medical progress uncritically and unproductively.

The indications for treatment having been determined dispassionately, the question becomes, what shall we say to the patient? The most important point here is that it is not what we say to the patient that

counts, but what he thinks we have said. How he interprets our remarks and what emotional effect they have on him. We doctors often think we have discharged our duty when we have given our advice, our directions to the patient, etc., but we have not. It is our further duty to find out how much of what we have said is comprehended, to what extent have we created fears or apprehensions which will stand in the way of the successful carrying out of the treatment we think indicated. Not infrequently when I ask a patient what a doctor previously in charge of his case had told him, he replies, "He didn't tell me anything." It is to be presumed that the doctor did tell him something, but the point is it didn't register. The doctor didn't get his advice across and accepted. This amounts to a therapeutic failure quite as bad perhaps as giving the wrong drug, or not giving the right one, or doing a wrong operation.

An essential ingredient in the make-up of the good physician is conscience; super-ego the Freudians call it. I prefer the old fashioned term. Most of us, I am sure, have active consciences, and how at times in the practice of medicine, they do plague us! I have always thought the words of the prayer book "We have done those things which we ought not to have done, and we have left undone those things which we ought to have done and there is no health in us," apply particularly to the practice of medicine. Certainly the doctor should make this confession in his heart at frequent intervals in all sincerity, but he should take it as a challenge always to do better and not let it get him into the way of despair. Since we are not omniscient, we are bound to make mistakes in the practice of medicine. Some of these may do our patients serious injury. I would make the points, first, that we must try to profit by our errors, and second, that when they are due to what may be reasonably called normal human frailty, we do not permit ourselves to become overly depressed by them. When, however, it is clear to us that there is an element of negligence, then our consciences will truly plague us and rightfully so.

There are occasions when our consciences let us down—fail to inform us where our duty lies. Such situations arise when we are torn between conflicting loyalties, as for example, our duty to our patient vs. our duty to his family or to the community, when these are inimical one to another. Such problems are not medical at all, but moral. One may need the help of a moral philosopher to settle them. A few years ago I asked a minister, Dean Willard L. Sperry of the Harvard Divinity School, to discuss them with our hospital staff and students. He was very helpful, and I am happy to say that he has expanded the remarks he made on that occasion into a little book entitled, "The Ethical Basis of Medical Practice." I commend it to you heartily.

The matter of self-justification or face saving in medical practice must be mentioned. That to admit

error is for the doctor to lose caste, is commonly believed. No doubt there is some truth in this, but my experience has been that the public has increasing respect for complete candor on the part of the doctor, and that nowadays the doctor may lose more face by trying to save face than by forthrightly admitting his mistakes or by saying he doesn't know, rather than by throwing some bluff. The relation of the doctor to the autopsy is pertinent in this connection. Alan Gregg has made the point that if the public ever learn that they will get better medical care when autopsies are universal, there will be no more requesting of autopsy permission, rather autopsies will be demanded by the patients' relatives. The doctor on occasion has reason to dread the denouement of the autopsy. It would be so much less harassing quietly to bury one's mistakes. This is natural enough human behavior, but while it may be natural it isn't noble, therefore, I believe the doctor always should strive for an autopsy in the case of every patient who dies while under his care. It is one of the trials that the highest type of medical practice requires.

About the collective, especially the political behavior of doctors, I only wish to make the point that insight is as necessary as in individual behavior. When they engage collectively in political behavior, which they seem nowadays to be doing to an ever greater extent, they should understand their motivations quite as well as in dealing, as individuals, with patients, but I am sure that for the most part they do not. Ponder a moment the question—whose battle are we fighting? Whose medicine is it anyway, the doctor's or the patient's?, and in so doing give heed to lay opinion as well as to that of the organized profession. "Oh wad some power the giftie gie us to see oursels as others see us." The others in our case are the laymen.

Finally, a few words on the social behavior of the doctor, and I will have done. Not long ago I conversed with a life-long friend, an archaeologist, about the behavior of doctors as cultured persons. "They are intellectually very isolated," he said "and getting more so. In the early days at the X Club there were physicians like Dr. L and Dr. C. who could talk interestingly and authoritatively on other subjects than medicine. They were in fact delightful conversationalists, also good doctors, but now all the doctors will, or can, talk is shop, shop, shop."

Of course there is a tendency for those in any walk of life to foregather with one another socially, and then inevitably talk shop, but the doctors are perhaps the greatest offenders in this direction. They segregate themselves in clubs, and by the same token drive others out. Lawyers associate at least with financiers and businessmen, besides other lawyers, but the doctor often meets such people only professionally. Of course these remarks do not apply to the little community with perhaps but one doctor. He perforce must associate with others than his kind or become intellectually a hermit.

The correction for such tendencies are fairly obvious, namely, the development of secondary pursuits or interests—hobbies, public service or philanthropic enterprises. For maximum satisfaction in living there must be an avocation to balance vocation, and it must be creative in one way or another, or satisfying in that it helps make the wheels of your community go round.

These remarks, like those on responsibility, may seem to you banal and platitudinous, but I assure you I have known many doctors who have no interests outside of their professional work. They work until they are exhausted, and in an exhausted state they can do nothing creative. The spectacle of a man whether doctor or other, who works himself to pieces so that he may save enough ultimately to retire, but when the time for retirement comes, has no other

interest to keep him going, is truly pathetic. In this regard I would like to recommend to you Mr. Winston Churchill's little essay entitled "Painting as a Pastime." It is a little gem of wisdom, and also beautiful English prose. It may be helpful in your own case, or it may be just the right book to prescribe for a patient. By the way, on the matter of books I am reminded of the wise remarks of that delightful physician, the late Gerald Webb of Colorado Springs. He said that nearly anyone with a modicum of brains can be taught to prescribe the right drug, but it takes a doctor with insight and discernment to prescribe the right book for a patient. I believe that he had something important.

And now I have finished. I thank you for your kindness in giving me the opportunity to address you, and for your charming hospitality.

Cardiac Catheterization In The Diagnosis Of Congenital Heart Disease

JOHN A. BOONE, M. D.
Charleston, S. C.

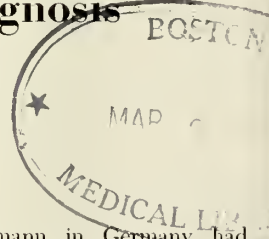
Until a very few years ago, the diagnosis of congenital heart disease was about as far as most clinicians could go when faced with a patient born with a defective heart. It was recognized that those with cyanosis had generally a poorer outlook for health and life than those without cyanosis, and that many of both types were apt sooner or later to develop bacterial endocarditis or heart failure. The exact anatomical deformities present could in a few cases be predicted with reasonable accuracy, but in the majority, exact diagnosis was a pleasant academic pastime between the clinician and the pathologist, with the odds heavily in favor of the pathologist.

Rather suddenly, however, the diagnosis of congenital heart disease became no longer a matter of pure intellectual curiosity. The development of a successful procedure for the cure of patent ductus arteriosus by Dr. Robert Gross of Boston, followed by the relief of cyanosis in the tetralogy of Fallot by Dr. Alfred Blalock of Baltimore, gave impetus to intensive surgical effort toward the repair of congenital heart defects. Immediately it became necessary to have more exact preoperative diagnosis of the anatomical errors present in these cases.

Already the clinical methods of diagnosis had been greatly advanced by the classical studies of Maude Abbott and Helen Taussig. But the inherent variability of clinical and x-ray signs too often led to error, and many patients were refused operation in spite of having remediable lesions, or unexpected findings at operation would render the exploration useless.

Twenty years ago Forssmann in Germany had demonstrated the feasibility of passing a fine ureteral catheter by way of superficial veins into the right side of the heart and through it into the pulmonary artery. This procedure offered the possibility of getting a great deal more information about the structural and functional abnormalities present in congenital hearts. It has been applied to this purpose in America by several investigators, especially by Warren, Dexter, Bing and Courmand.

The information to be gained from catheterization of the heart and pulmonary vessels depends upon the fact that normally the right side of the heart and the pulmonary artery contain venous blood of low oxygen content, while the left side of the heart and pulmonary veins contain arterial blood of high oxygen content. Moreover the blood pressure in the right ventricle and pulmonary artery is quite low and about equal in both, while that in the left ventricle approximates arterial pressure. Therefore by measuring pressures at various points, and the oxygen content of blood samples taken at these points, it can readily be seen that a great deal of information as to existing defects can be deduced from variations from the expected normal in the pressure and oxygen saturation figures. Also the catheter, which is radio-opaque, can often be seen under the fluoroscope to pass through defects in the auricular or ventricular septum. Another diagnostic aid that is beginning to demonstrate its usefulness is angiocardiology, where techniques of rapid radiography make possible the visualization of the heart and great vessels after the injection of opaque solu-



tions by vein or through the cardiac catheter.

When the South Carolina Heart Association just one year ago began its program of setting up heart clinics over the state, the Medical College in Charleston was selected as the center for diagnosis and treatment of congenital heart disease. Equipment for this purpose was purchased by the Heart Association, and funds were made available both for diagnostic hospitalization and for surgical treatment of indigent congenital heart cases referred by any physician in the state.

The equipment used in our clinic includes a Sanborn Poly-Viso Cardiette for simultaneously recording the electrocardiogram and pulse pressure waves from the cardiac catheter; a Sanborn Electromanometer for converting the pressure pulses into electrical waves for recording; a Waters-Conley oximeter for continuous, immediate measurement of blood oxygen saturation; and a Sanchez-Perez rapid cassette changer for use in angiocardiology.

The catheterizations are performed by a trained team drawn from several departments at the Medical College. One physician and an assistant pass the catheter and take blood samples. A radiologist guides the passage of the catheter by fluoroscopic control. An anesthetist is used for young children, although none is needed in older children and adults. Two physicians operate the pressure recorder and the oximeter. The patient is connected to a direct reading electrocardiograph and the heart rhythm is observed continuously during the whole procedure. A technician of the chemistry department receives the blood samples for gas analysis.

Under local anesthesia the catheter is inserted into the median vein at the elbow and guided into the subclavian vein, superior vena cava, right auricle, right ventricle and pulmonary artery. As the catheter is withdrawn, pressures and blood samples are obtained at various points. Except when these are being done a constant drip of saline or glucose is maintained through the catheter to prevent clotting.

Though potentially a dangerous procedure, many thousands of these determinations have been done at various centers with few untoward events. The most important danger is the production of arrhythmias from stimulation of the endocardium by the catheter tip. The arrhythmias are quickly recognized by continuous observation of the electrocardiogram, and disappear if the catheter is withdrawn slightly before proceeding. A few illustrative cases from our experience with this technique over the last five months are presented:

Case 1: A 7 year old white female. For the first time one month ago found to have a heart murmur. Never cyanotic, mild exertional dyspnea. Loud grade 2 or 3 systolic murmur over whole left chest, maximal at 2nd and 3rd left intercostal spaces near sternum. Blood

pressure 95/60. EKG showed right axis deviation. X-rays of chest showed moderate enlargement, more on right, fulness in pulmonary conus and artery. Catheter passed through auricular septal defect on 2 occasions.

Pressure:	Oxygen	Saturation:
Superior vena cava		79%
Right auricle		100%
Right ventricle	45/0	89%
Pulmonary artery	40/15	93%

Impression: large auricular septal defect.

Recommendation: not amenable to surgery.

Case 2: 8 year old colored female. Heart murmur known since infancy. No disability or cyanosis. Loud machinery murmur at 2nd and 3rd left intercostal spaces. Blood pressure 115/60. EKG: left axis deviation. X-ray: minimal enlargement, full pulmonary artery, active hilar pulsations.

Pressure:	Oxygen	Saturation:
Superior vena cava		70%
Right auricle		73%
Right ventricle	70/0	73%
Pulmonary artery	35/15	98%

Impression: pulmonary stenosis and patent ductus arteriosus.

Recommendation: the lesions are mutually compensatory and no operation indicated.

Case 3: 12 year old white female. Heart murmur heard first 3 months ago. No dyspnea or cyanosis. A loud, continuous machinery murmur maximal between 2nd left intercostal space and clavicle. Blood pressure 120/50. X-ray: slight enlargement of both ventricles, exaggerated pulsations in pulmonary artery. EKG: normal tracing, no axis deviation.

Pressure:	Oxygen	Saturation:
Superior vena cava		62%
Right auricle		73%
Right ventricle	35/0	75%
Pulmonary artery	30/10	87%

Impression: uncomplicated patent ductus arteriosus.

Operation: Successful ligation of patent ductus. Murmur disappeared completely. 2 months after operation, no murmur, blood pressure 110/80. X-ray: heart normal in size.

Case 4: 11 year old colored male. Cyanosis since infancy, marked limitation of activity. Chubbied fingers and toes, harsh systolic murmur and thrill in 2nd left intercostal space. Red blood count 6,000,000. X-ray: marked right-sided enlargement. EKG: right axis deviation.

Pressure:	Oxygen	Saturation:
Superior vena cava		74%
Right auricle		78%
Right ventricle	100/0	76%
Left ventricle	100/0	89%
Pulmonary artery	0	76%

Impression: tetralogy of Fallot.

Operation: left subelavian artery anastomosed to left

pulmonary artery. No change in murmurs post-operatively, but boy can now run and play with other children, though still cannot keep up with them.

From these and many other cases, we are convinced of the value of these measurements in the accurate diagnosis of congenital heart disease. We believe they are indispensable in any instance where surgical treatment is contemplated.

Behavior Disturbances In Children*

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While in present day psychiatry and in medicine generally it is recognized as important to avoid any artificial mind-body separation, there is still convenience in classifying the behavior disorders of children in two general groups—those due to definite organic factors and those due largely to functional or psychological causes.

In the group of disorders due to organic causes, to list some of the more important, are disturbances of behavior due to the effects of encephalitis, trauma to the brain, epilepsy, the endocrinopathies, juvenile paresis. In this paper I shall consider briefly some of the possible effects of encephalitis, and trauma, and then go on to the functional behavior problems.

As there have not been in recent years any severe and widespread epidemics of epidemic encephalitis, child psychiatric clinics have not seen as many behavior problems due to this disease as were seen in the twenties. Spasmodic cases occur, though, as do cases of other types of infectious encephalitis. And it is well to bear in mind that at times a relatively mild and perhaps unrecognized encephalitis may occur in the course of measles or other of the infectious diseases of childhood, and that this apparently mild encephalitis may play some part in later developing behavior disturbances. The behavior disturbances following encephalitis often take the form of overactivity, with frequently destructiveness, impulsiveness, running away, stealing, lying, sex offenses, and evidences of emotional instability. The overactivity has been described as an "organic drivenness" of brain stem origin. The anti-social behavior is not accompanied by any degree of remorse, but the child often is in some degree aware that he cannot control the behavior. Differentiation of cases showing this sort of post-encephalitic behavior from cases of psychopathic personality without organic basis may at times be difficult. In the absence of a clear-cut history, neurological findings (including the electroencephalogram),

and psychological tests would have to be relied on. Neurologically there are frequently found disturbances of the aculomotor muscles, choreiform movements, loss of associated movements. Parkinsonism does not occur so frequently in children but is said to occur in 50% of post-encephalitis followed over a long period of time. On psychometric testing the post-encephalitic may show a disturbance of spatial orientation, interfering with his copying certain forms; poor memory for digits; or some impairment in his ability to judge weights. If the encephalitis occurs very early in life there may result marked mental deficiency. The possible devastating effect of early encephalitis is illustrated by the case of T. C., a Negro boy seen at age 8 at the request of a Public Health nurse because he seemed definitely mentally retarded. According to the mother he was the fourth of eight children and the only one that seemed in any way abnormal. She said that he had not walked until three, still could not talk plainly, had achieved neither bladder nor bowel control, and about twice a month was subject to episodes of laughing and crying, would run out in the street and was difficult to control. When examined, the child spoke a peculiar jargon, with only an occasional recognizable word, laughed in an odd way, and at times acted almost as if responding to hallucinations. At first the possibility of the child's being a schizophrenic was considered, though there was more display of affect and more interest in the personal environment than would be expected in childhood schizophrenia. Tentatively the case was diagnosed as congenital mental deficiency. However, it was learned that there had been two hospitalizations, the reasons for which the mother was very vague about. The record of one of these hospitalizations was available and revealed that the child had had an encephalitis at age 7 months and during the course of an otitis media. There had been definite spinal fluid changes, temperature had been 105°. It seemed fairly clear that the retarded development, emotional instability, and overactivity were due to this early encephalitis. Treatment of severe post-encephalitic behavior problems seems on the whole of little avail.

* (Read before annual session, May 1950, Myrtle Beach, S. C.)

And for some of them institutional care is indicated.

A quite different case is that of B. H., an eight year old boy brought to the clinic because of his frequent running away, refusal to do anything his mother told him, a tendency to steal money from his parents, and temper outbursts towards a three-year-old sister. The onset of this sort of behavior was definitely dated as having followed an attack of measles about six months previously. He had posed no particular behavior problem prior to that. However, the mother did say that on beginning school he had not gotten along well, as others had picked on him, and at times she had not wanted him to play with children in the neighborhood because she was afraid they would "run over" him. The attack of measles had apparently not been a very severe one and the child had not been hospitalized. But in retrospect the mother recalled that his temperature had been quite high and that he had been a little drowsy. When examined he was found bright and alert. His I. Q. was 111. He said that he had come to the clinic because he lost his temper all the time, especially in dealing with his younger sister, and that he tried to control his temper but that he couldn't. An electroencephalogram showed a marked cortical dysrhythmia representing a petit mal type of seizure. Closer observation by the mother revealed that he was having occasional petit mal attacks. He was placed on Dilantin and no further seizures were noted over the next two months and his general behavior improved for a time, there being no running away and much less show of temper. However, at a later visit, the mother reported that he was again rather aggressive and playing hookey. And in talking with the boy, his attitude was that no one loved him, that everyone picked on him, and that his only retaliation was to be bad. It became clear that the behavior problem could only be partially explained by the cortical dysrhythmia and that there was a definite emotional problem present. This is a recent case and what will be the later developments under combined psychotherapy and suppressive drug therapy can't be foretold. However, the case is illustrative of the combination of fairly specific organic and emotional factors at times found in behavior problems and the multiple approach necessary.

In behavior disturbances that follow head injuries we also find that the prognosis does not depend solely on the extent or location of the damage but partly on psychological factors in the child's home both before and after the injury—that is on the attitudes of the parents and others in the child's environment. That point was stressed by Dr. Lauretta Bender in a study of brain injured children at Bellevue. Soon after a head injury, she points out, there may be much anxiety and fear with a regression of behavior to more childish levels, and careful attention and reassurance are needed during that stage which may last only 7-10 days. In those cases that develop chronic behavior disorders there is a close resemblance to the post-encephalitic disturbances, with perhaps im-

pulsiveness, destructiveness, stealing, lying, restlessness, excessive sex drive, insomnia or sleep reversal, depression or elation. Often a pseudo mental deficiency is seen, manifested by poor school work but which is due to lack of attention rather than to a real mental deficiency. However, if epilepsy develops in the child as the result of localized damage, there does tend to be a progressive mental deterioration. But, on the whole, it was found that a group of brain-injured children, followed over a period of years made a surprisingly good adjustment. And while the electroencephalogram and special psychological tests are useful in detecting the presence of an organic factor in mild or questionable cases, the prognosis depends on a combination of factors, of which the organic is only one.

The following case is illustrative of some of the behavior problems that may develop following a severe brain injury. C. H. is a boy who in June 1948 at age eleven was struck over the left temporal region by a baseball. Two hours later he lost consciousness and was hospitalized. On the following day an extradural hematoma overlying the left hemisphere was removed and the middle meningeal artery ligated. On discharge about a month later there was a spastic weakness of the left side and practically complete loss of vision in left eye and loss of temporal vision in right eye. When seen in the out-patient clinic soon after leaving the hospital, his mother described his speech as at times jumbled, with words "all mixed up." In succeeding months, clinic notes made no further reference to any speech difficulty but described an increasing behavior problem and a tremendous appetite. There was frequent mention of his severe temper tantrums and the difficulty in controlling him. One physician in contact with the case was inclined to think the mother was spoiling the boy and felt uncertain as to just what part organic factors played in his behavior. An EEG in February 1949 was indicative of a generalized increase in cortical excitability. With this indication for suppressive medication he was started on Dilantin. There followed some improvement in his behavior which was paralleled by an improvement in the EEG. However, things have not gone too smoothly and recent reports describe him as flying into rages on little provocation, as picking on his younger brother, spending much time in bed reading funny books, and occasionally stealing. Perhaps contributing to the more recent difficulty, and illustrating the fact that we must give full consideration to all aspects of the problem and not over-emphasize the organic factors even in such a predominantly organic case as this, was the hospitalization of both parents in the fall of 1949 for tuberculosis. The patient and his younger brother are in the home of a great aunt who does the best she can but who is employed as a schoolteacher and finds it difficult to provide the supervision and attention needed. Interestingly, the patient who has attended school irregularly in recent months, has

shown that he can make fair grades even though he doesn't apply himself very hard. His I. Q. on a recent test was 81, which is within the dull normal range.

In the functional behavior problems, the general cause is that of conflicts in the emotional life, which means really a disturbance in the child's relationship to others. And the significant others are the members of the child's immediate family, the parents and siblings. And therefore we see the emphasis in child psychiatry on approaching the child's problem as a family problem. This is to some extent true of the psychiatric approach in general, but especially true in the case of the child because of the child's relative dependence. The child's problem then is considered not in isolation but in its relationship to the child's family setting. That being the approach, the child's mother, and at times the father or others in the family, are brought fairly actively into the treatment program. In the average child psychiatric clinic, the child is seen by the psychiatrist and the mother by a social worker. The social worker not only obtains a history of the child's problem from the mother and serves as a mediator between the clinic and family, and at times school, but she also tries to help the mother to see more clearly how she—and others in the family—are involved in the problem. She is encouraged gradually to bring out and to examine her own feelings and attitudes and to see in what way they are related to the child's problem. Psychiatrist and social worker in this sort of set-up naturally work in close collaboration. Such collaborative treatment is seen in the following case.

Jane O. was an eight-year-old girl who was brought to the clinic by her parents at her teacher's suggestion because of not doing her work though she had the intelligence to do it, and because of her rather rebellious, attention-seeking behavior, and her apparent inability to participate in group activity. Her parents were responsible, conscientious people but it soon became apparent in the clinic's contact with them that they were rather rigid, meticulous, and perfectionistic. It was learned that the father had said before the couple had any children that he couldn't stand children who weren't well behaved. There was one other child in the family, a baby of whom Jane was obviously rather jealous.

In Jane's first interview with the physician she presented the picture of an insecure child who attempted to cover her insecurity by demanding, aggressive, hostile behavior. She had hardly entered the office before she began grabbing objects, saying that she was going to take them home with her. She took all of the toys out of the cabinet, and at the end of the interview she refused to put them back and protested the termination of the interview.

Jane's parents when seen by the social worker at first attempted to deny that Jane was any problem, saying that they brought her to the clinic only at

the teacher's suggestion and that she was no problem at home. Then they admitted that the child was stubborn and that she bragged about being bad. The social worker in this first interview stressed the importance of the parents' recognizing the existence of a problem before the clinic could be of any real assistance, and that if Jane were to be treated it would have to be a matter of co-operation and participation of all concerned. In following interviews the mother complained that Jane was becoming increasingly difficult, demanding attention and continuing to do bad things. Punishment did not seem to help—the mother said that Jane had at times been severely whipped and on one occasion locked in the attic for several hours, and despite this she would come to her father, tell of some wrongdoing and seem to invite further punishment. She seemed desperate for playmates but would play only with younger children and tended to antagonize other children by her need to be the center of the stage. The mother wondered if the child could have a brain tumor pressing on a nerve because she couldn't keep still. At another point the mother tended to blame the community for the child's troubles, saying that the people were cold and unfriendly. (We see here, as we often do in such problems, the mother's difficulty in accepting her share in the problem—first she would have it that the child is only a problem in school with the implication that it is the school's problem, then she looks for a physical cause which will more or less leave her out of it, and then she attempts to project her problem to the community, and it becomes the fault of the unfriendly community.) The mother further reported that Jane's school adjustment was such that the school authorities did not want her to return the next year.

In her next interview with the psychiatrist, Jane, seeing in the office a bridge built of toy blocks, asked who had built it. When told another girl, she immediately destroyed it, saying that she could do anything much better than the other girl. She was pretty aggressive in her behavior, but when no particular correction or criticism was forthcoming she seemed taken aback, more insecure and uncertain of what to do. Finally she built with blocks what she said was the physician's office, and then she proceeded to enact a scene in which she entered the office with a gun but with the physician seated without a gun. She seemed to be saying then in this play activity that she had come into the treatment situation on guard, with all her defenses up (with a gun), but the physician had not been particularly critical or controlling of her and seemed somewhat susceptible to her wishes (he was without a gun). She then placed other toy figures outside the office and said, "They are bad people that want to get in, but they can't get in here." Here she seemed to be expressing her feeling of security in the office, and perhaps her satisfaction in having the interview her own private affair, and also to be saying that she was leaving her badness on the outside.

Coincident with the enactment of this scene her behavior during the interview became less aggressive and destructive.

The father when seen by the social worker about a week later said that bringing the child to the clinic had lessened his and his wife's tension considerably.

In the next few interviews with the physician, there was much less aggression and hostility manifest, but there was still a strong need for recognition. (It seemed that she was gradually finding that she was accepted by the physician for herself, and that while he had certain limits that had to be observed—she couldn't break windows and she couldn't use the Dictaphone, for instance—he was not primarily interested in correcting or scolding her. In this setting she seemed to find less need for hostility.)

The mother, in her talks with the social worker, continued to project her difficulties on to the environment—they had moved to a new neighborhood and that had increased the difficulty—and she continued to ask further whether there wasn't some physical cause for the problem. She reported that the child was making enemies in the new neighborhood as she picked on the younger children and told exaggerated stories of her accomplishments. She was afraid to skate with other children or to ride a bicycle. She tried to make herself conspicuous whenever her parents were around and gave them no peace. The social worker felt that the mother, who up to this point in the interviews had been rather on guard, with some underlying tension and hostility, now seemed on the point of desperation, and was able to bring out better her real feelings and to begin to establish a better relationship with the worker.

However, in view of the parents' continuing concern over the possibility of an organic cause for the behavior problem, the physician agreed to have an electroencephalogram made. But then the mother, surprisingly, seemed unable to bring herself to have this done. (With this mother's difficulty in accepting her part in the child's problem, and her need to find some other cause, it is possible that she unconsciously resisted a procedure which would tend to rule out more definitely the possibility of an organic cause. If that were done she would then have no loophole.) The mother emphasized what an effort it was for her to help Jane with her schoolwork. It was a burden she said because she was constantly thinking of all the other things she had to do, and she complained that her husband gave her no help with household duties.

It had become clear by this time that the mother was a tense, compulsive, anxious person, who partially controlled her anxiety by keeping herself busy. She was very exacting in her household duties and had to have her home and her schedule in perfect order. For Jane she had very definite ideas of the pattern Jane must follow, and she had difficulty in seeing

beyond that rigid pattern. But the mother had come to where she could bring out better her personal feelings and problems in the interviews and she seemed appreciative of the help given her. In the next interview she reported that Jane was doing much better.

In the physician's further interviews with Jane she showed no marked change on the whole. She continued to seek for recognition and approval but in a more realistic way—demonstrating her ability in writing and arithmetic, and reporting that she no longer was getting spankings in school. And while she continued to be rather restless there was not the markedly aggressive behavior shown at the start of treatment.

The parents reported continuing improvement in Jane's behavior at home and in school. Treatment, which had been on a weekly basis for the most part, was discontinued after a period of about eight months.

The presenting symptom of the behavior disturbance may be any one of a wide variety—thumbsucking, night terrors, stealing, enuresis, masturbation, temper tantrums, seclusiveness, etc., etc. But it cannot be too much stressed that the symptom here, as in other fields of medicine, is but a more or less surface phenomenon expressive of some underlying pathology. And in the behavior problems the underlying pathology is some disturbance in the child's life that is causing him anxiety. Dr. Leo Kanner, Director of the Children's Psychiatric Service at Johns Hopkins Hospital has well described the meaning of the symptom in child psychiatry. He considers the symptom first in terms of a complaint item, a behavior phenomenon which has a certain nuisance value as far as the parent is concerned. And a particular symptom will vary in its nuisance value with the parent who happens to be involved. He then refers to the symptom as an admission ticket to the doctor's curiosity, comparing the symptom to an admission ticket to a play which gives a few facts such as the title of the play, time and place of performance, but gives no inkling of the play's plot. Further the symptom represents the child's distress signal—unconsciously used but nevertheless a call for help with the underlying difficulty. At the same time the symptom represents—as with the adult neurotic symptom—a compromise solution of the child's difficulty, an effort at adaptation to the situation in which he finds himself. But most important to remember is that the symptom which the family will present as the problem to be corrected—thumbsucking, for instance—can't be effectively treated simply as a symptom. There is no one cure for thumbsucking any more than there is one cure for fever. And efforts at treating the symptom in isolation from the rest of the child's life are not likely to be very successful. And if an apparent success in treating and removing a symptom is achieved through simply making continuation of the symptom unpleasant, one would want to look carefully to see whether some other symptom didn't soon appear.

The story behind the symptom, then, is more important than the symptom. And the story behind the symptom will of course vary, but anxiety seems basic to symptom formation. And anxiety—that is, anxiety continued over any length of time and not just in response to some very transient situation—represents the lack of relative emotional security in the child. The child is able to enjoy a reasonable degree of emotional security and freedom from anxiety only when its basic emotional needs are provided by the parents. These needs seem to be: For genuine warmth and affection, without smothering; for acceptance as an individual in his own right; for consistency in attitudes towards him so that what is acceptable and what is not acceptable today is what is respectively acceptable and not acceptable tomorrow; and finally for avoidance of either undue harshness or undue leniency in discipline. Such basic principles seem easily understood and will be readily subscribed to by parents. But the fact that in practice they may not be observing one or more of these simple principles may not be so easily recognized. The parents of the child in the case just presented were intelligent, honest, conscientious people, and to the casual observer would probably seem good parents. Actually they were unduly perfectionistic and controlling, and somewhat over-protective. And if such underlying attitudes often may not be obvious to the neutral observer, it is understandable that they will be much less obvious to the parents themselves. The mother in a given case is not likely, for instance, to recognize that she is neglecting her children to a dangerous degree in a busy program of social or civic activities; or again that in her perfectionistic striving to have the child conform exactly to her preconceived and detailed pattern of what the child should be, she is forgetting important human values. She is not aware that these attitudes are hers because they are attitudes that have been built up unconsciously and are intimately related to her own particular emotional needs. It has been said that "there are no problem children but only problem mothers." Certainly there is much truth in that. But at times so much is made of the point

that some come to feel that mothers are being unjustly criticized and we see articles written in defense of mothers. Actually, of course, there is no criticism of mothers—at least no criticism of their motivation—in the observation that children's problems seem related to their mothers' problems. A particular mother in her attitudes may seem an unfortunately bad influence for the child's emotional growth and development, but she is not a wilfully bad influence, only an unwittingly bad one. And if the mother can be helped with her anxieties, hostility or frustration so is the child likely to be helped.

One might ask what place, if any, the general practitioner has in all this. A treatment program has been described in which both the child and the mother are worked with fairly intensively, the physician seeing the child and a social worker the mother. The general practitioner, nor the private practicing psychiatrist can undertake treatment of that sort. But often the general practitioner will have a pretty good understanding of the family's composition, of the personalities involved, and of the emotional climate in the family group. It is true, as stated above, that the disturbing influences may not be too obvious, but may be an attitude that is expressed in rather subtle fashion. But where there is an obviously unhealthy relationship between parent and child, or between parents, and when the child presents a behavior disturbance not clearly related to organic factors, certainly the relationship of the child's symptoms to the intra-family disturbance is to be suspected. And some general counselling around this problem—which the parents themselves may well have suspected but need support in discussing—should be possible.

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Cardiac Evaluation In Combined Respiratory Vascular Disease*

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In the patient with chronic respiratory disease it is important to evaluate from time to time the proportionate role played by the lungs and the heart in the resultant areation failure.

The interest in this paper will be focused on a discussion of this problem, with special emphasis on practical methods to be used in assaying these two factors in the following group of cases:

- 1.—Asthmatic emphysematous patients with evolving right sided heart failure (*cor pulmonale*).
- 2.—Asthmatic emphysematous patients with heart disease other than *cor pulmonale* i.e. primary heart disease.
- 3.—Problems in differential diagnosis between (a) left sided failure with degrees of pulmonary edema—with and without paroxysms of cardiac asthma; (b) inflammatory lung disease; and (c) bronchial asthma.

The problem of *cor pulmonale* can be best understood by retracing the general concept of development of the pathologic states: chronic bronchitis, bronchial asthma, bronchiectasis and pulmonary emphysema.

Bronchitis, whether infectious or allergic in its inception, is reversible at the end of each paroxysm. After an indeterminable number of attacks, the operative mechanism leaves its pathological imprints which are manifold.

Reaction to injury in the bronchi tract is in terms of hypersecretion in the mucous glands with edema of the mucosal and sub-mucosal structures, plus peri-bronchial smooth muscle spasm. In the alveoli there is an abnormal diffusion of fluid across the semi-permeable respiratory membrane. With this wetting of the alveolar respiratory membrane and the narrowing of the bronchial lumen ventilatory function is obviously hampered. There results a pocketing of air and fluid in the terminal bronchi and air vesicles. Explosive cough and forced respiratory effort results in over-distention and rupture of groups of alveoli. Trapped mucous and transuded fluid become a test tube culture medium for respiratory bacteria. With repeated such insults over a period of years there results structural respiratory disease: *bronchiectasis*, *emphysema* and *pulmonary fibrosis*.

With the development of this advanced anatomic state, all compressible tissue is impinged upon. The diaphragms are pushed down and are fixed. The intercostal spaces are widened and precordial dullness ob-

literated. There results an increased resistance in the pulmonary vascular circuit reflecting an increased work load on the right ventricle. Brill¹ has estimated that the pulmonary circulation can carry on up to the point of 60% increase in work load, or 60% obliteration of the pulmonary vascular bed.

Soma Weiss² and Blumgarte studied the velocity of blood flow in a series of patients with emphysema. Reporting on vital capacity, venous pressure and arm to arm circulation time, the following was determined: In individuals with moderate to marked decrease in vital capacity the venous pressure was normal to decreased and the circulation speed, normal to slightly accelerated. When the emphysematous state progressed to the point of a moderate increase in venous pressure and increased circulation time, right sided heart failure was eminent and the patient went rapidly down hill. Weiss postulated that just prior to this break in compensation that adequate circulatory dynamics were maintained by the last expendable heart reserve.

Hickam and Cargill³ studied the effect of exercise on cardiac output and pulmonary arterial pressure in normal, cardio-vascular and pulmonary emphysematous patients. Pulmonary arterial pressure studies were by pulmonary arterial catheterization. Normal subjects during exercise showed no increase in intra-pulmonary arterial pressure above the normal mean of 8 to 15 MM of Hg. The group with pulmonary emphysema showed an initially elevated pulmonary arterial pressure and there was a further substantial increase in pressure with exercise.

A. Zimmerman⁴ measured pulmonary arterial pressures in five individuals during attacks of bronchial asthma. All patients had abnormally high pressures in the pulmonary artery. When the asthma was relieved by Aminophyllin, the pressure fell to subnormal level. Patients who were relieved by Adrenalin had an initial increase in pulmonary arterial pressure. The resultant cardiac output was greater in the group relieved with Adrenalin than in the group relieved by Aminophyllin.

Lewis Dester⁵ studied the problem of pulmonary vascular dynamics in a series of patients (18) with a variety of chronic pulmonary lesions, i.e. asthma, pulmonary fibrosis and emphysema. A study of pulmonary arterial, arteriolar, and capillary pressures was made. Using the formula of Bozett and Lamport the index of pulmonary arteriolar resistance was calculated. Pulmonary capillary pressure was normal in all cases. Arterial and arteriolar pressure was elevated in 16 of the 18 cases investigated. Arteriolar resist-

* (Read before annual session, May, 1950, Myrtle Beach, S. C.)

ance was increased 20 or more times. By comparison—in malignant hypertension of the systemic circulation peripheral resistance rarely increases more than four-fold. This gives a rough comparison of the capable work loads and reserve of the right and left heart. Dexter concludes that the circulatory difficulties incident to chronic pulmonary disease—"chronic cor pulmonale"—are directly related to the resistance to blood flow through the arterioles of the lungs.

The data presented by Weiss and enlarged upon by Hickam, Zimmerman, Dexter and others does much to clarify the complex problem of the response of the pulmonary circulation to pulmonary disease. Increased pulmonary arterial and arteriolar pressure precedes right heart failure and the resultant increase in systemic venous pressure. The last citadel of cardiac reserve is used to increase pulmonary blood flow to compensate for the disordered gaseous exchange.

Individuals with chronic lung disease are not exempt from heart pathology other than cor pulmonale: hypertensive, coronary, valvular, etc. The problem of dyspnoea and its evaluation becomes further complicated when it is realized that incidences of primary left sided failure with associated back pressure pulmonary hypertension can produce the wheezy physical signs of bronchial asthma (Milton Plotz⁶) and the cotton wool infiltration associated with primary atypical pneumonia and broncho-pneumonia.

The work of Richards, D. W., Jr.,⁷ and McMichael, J.,⁸ referable to high out-put and low out-put failure is applicable here. In individuals with considerable grades of destructive lung disease, as exemplified by advanced emphysema of chronic bron-

chial asthma, right sided and consequently left sided cardiac out-put is stepped up to compensate for the resultant faulty respiratory membrane. When right sided failure ultimately occurs, the failure is at a high out-put level, consequently there is a late reflection of the failure by circulation rate determinations. This is in contrast to the circumstance operative in primary left sided failure where the minute out-put is already low at the onset of failure, hence an exaggerated prolongation of the circulation time.

A number of cases grouped in series will illustrate the categories originally posed for discussion. Each patient has been observed for a period of several years. Detailed clinical and laboratory evaluation has been kept. Additional accessory data has been accumulated as follows:

- 1.—Venous pressure readings were recorded using a No. 18 needle in the median basilic vein connected by three-way stop cock to a manometer containing citrate solution. Pressure readings were recorded at the phlebostatic level. Venous pressure was recorded at rest and after exercise in the recumbant position (thighs flexed on the trunk rapidly until patient was moderately dyspnic).
- 2.—Circulation time, arm to tongue, was measured using Decolin (sodium dehydrocholate) injected rapidly through No. 18 needle.
- 3.—ECGs were studied with special emphasis on axis and strain patterns.
- 4.—X-rays and fluoroscopies of the chest were read to study cardiac silhouette and chamber enlargements.
- 5.—Vital capacity was recorded using simple bellows bag.

GROUP I
ASTHMATIC EMPHYSEMATOUS PATIENTS
With Evolving Right-Sided Heart Failure

Name	Age	Occ	Diagnosis	Ven. Pres.	Vit. Cap.	Circ. Time	EKG	Evaluation
Mr. ESM	70	CPA	Ch. Bronchitis Bronc. Asthma Emphysema	7 cm. 12 cm.	1.0 l. 24.0%	18 sec.	Rt. Ax.	Vent—— Circ——
Mr. EKM	55	Boil Mkg.	Ch. Bronchitis Bronc. Asthma Emphysema	4 cm. 6 cm.	1.2 l. 27.0%	13 sec.	Rt. Ax.	Vent—— Circ
Mr. HAB	50	Bus Drv.	Ch. Bronchitis Bronchiectasis Emphysema	13 cm. 16 cm.	2.4 l. 57.0%	13 sec.	Rt. Ax.	Vent—— Circ——
Mr. LSB	52	Trk. Drv.	Interstitial Fibrosis (pn 1946)	12 cm.	37.0%	12 sec.	Rt. Ax.	Vent——
Mr. TWR	60	Stone Cut.	(Silicosis) Interstitial Fibrosis	7 cm. 9 cm.	3.0 l. 70.0%	12 sec.	Rt. Ax.	Vent—— Circ
Mr. HEW	62	RR Br.	Ch. Bronchitis Bronc. Asthma Emphysema	9 cm. 10 cm.	1.8 l. 44.0%	16 sec.	Rt. Ax.	Vent—— Circ

Group I — Asthmatic Emphysematous Patients with Evolving Right-Sided Heart Failure (Cor Pulmonale)

Case No. 1—Mr. E.S.M. was a coughing, wheezing, severely dyspneic 70-year old accountant. He had experienced more colds and postnasal drainage than average all of his life. In 1938, he had influenza with broncho-pneumonia. This was followed by more and more respiratory infections and progressive dyspnea. In April 1950, he had an acute bronchitis and this culminated in extreme dyspnea requiring nasal oxygen, digitalization, etc. There was moderate ankle swelling during his acute illness; however, there has been very little peripheral edema since. Blood pressure 102/82. He had an ashy hue to ear lobes and cheeks and was dyspneic on conversation. The nasal turbinates were edematous and there was a mucopurulent nasal drainage. There was poor chest expansion with fixed inspiratory position. There was an increased anterior-posterior diameter of chest with moderate kyphosis. There were wheezes and coarse bronchial rales, grade II. Heart sounds were rhythmical without murmurs. A_2 equaled P_2 . Size was not percussible. There were peripheral arteries consistent with age. There was no peripheral edema and the liver was not palpable. ECG showed right axis deviation. Venous pressure was 7 cm. at rest and 12 cm. on exercise. Circulation time 18 sec. Vital capacity was 1.0 liter or 24%.

Case No. 2—Mr. E.K.M., 55-year old boiler-maker, complained of recurring respiratory infections and progressive dyspnea for seven years. With colds he has had frank asthmatic attacks; however, except during these episodes, his dyspnea is entirely exertional. He has considerable rhinitis in the winter but is practically free of nasal symptoms in the summer. There has been no ankle edema. Temperature was 98. Pulse 84. Respiration 18. Blood pressure 114/86. There was slight shortness of breath with the exertion of undressing. The center of the face appeared slightly pigmented. The neck veins were not engorged. The chest was barrel shaped and held in inspiration position. Breath sounds were distant and there were wheezes and coarse bronchial rales, grade II. Heart sounds were distant, rhythmical and without murmurs. P_2 was greater than A_2 . Heart size could not be percussed. The liver was not palpable and there was no peripheral edema. Radial arteries were consistent with age. Venous pressure 4 cm. to 6 cm. Circulation time 13 sec. Vital capacity 1.2 liters or 27% ECG—Right axis.

Case No. 3—Mr. H.A.B. was a 50-year old city bus driver. He complained of progressive cough, mucopurulent sputum and dyspnea since 1946. During the past years he has produced more than a cup of sputum in 24 hours, much of the time. He was forced to stop work six months ago because of weakness and fatigue incident to his cough and dyspnea. Bronchograms, July 1945, suggested minimal bronchiectasis. Blood pressure 120/86. There was cough

with each deep breath and he was dyspneic on movement around the room. There was red nasal mucosa and pharynx. The neck veins were not engorged. The chest was barrel shaped and held in inspiratory position. Breath sounds are distant and there were faint wheezes and rales. The heart sounds were rhythmical without murmurs; size was not percussible. A_2 equals P_2 . Liver was not palpable and there was no peripheral edema. Vital capacity was 2.4 liters or 57%. Venous pressure was 13 cm. at rest and 16 cm. after exercise. The circulation time was 13 sec. ECG was right axis.

Case No. 4—Mr. L.S.B., 52-year old truck driver, complained of progressive dyspnea since pneumonia in 1946. He was confined to the S. C. Sanatorium for two months in the spring of 1949 with the discharge diagnosis of non-tuberculous disease of the lung. Lately, he had been extremely dyspneic on slight exertion and even during conversation. He produces a half cup of mucoid odorless sputum per day. Weight loss was from 152 to 130 pounds in two years. His past health has been good. There was a T & A in the 15th year. Blood pressure 110/78. There was an ashy color to skin and obvious dyspneic at rest. The nasal mucosa, mouth and pharynx were negative. There was an emaciated, thin small chest with limited expansion. The breath sounds were distant and post-tussive faint wheezes and coarse and crepitant rales were audible at the bases. The heart sounds were rhythmical without murmurs. P_2 was greater than A_2 . The heart size could not be made out. The peripheral and retinal arteries were consistent with patient's age. The liver was not palpable. The neck veins were not engorged. There was no peripheral edema. Vital capacity 37%. X-ray of chest: Small chest without depression of the diaphragm or widening of the interspaces. (On fluoroscopy there was little decent of the diaphragm). There was a remarkable diffuse fibrotic process throughout the lungs. The transverse diameter of the heart was not enlarged. The broncho-vascular markings were increased. Venous pressure 12 cm. Circulation time 12 sec. ECG—Sinus tachycardia with prominent right axis deviation. There was a small Q-3 with inverted T-3.

Case No. 5—Mr. T.W.R., 60-year old stone cutter, complained of recurring cough for more than five years. He has had much more trouble in winter and the cough that developed during the past winter has persisted up to the present. His sleep has been interrupted by cough and he produces one to two tablespoons of thick mucopurulent sputum in 24 hours. He was dyspneic on slight exertion. There has been no peripheral edema. His father died with cancer of the larynx. Blood pressure 138/74. There was cough and audible wheezing on moving about the room. The neck veins were not engorged. There was poor chest expansion with wheezes and coarse bronchial rales. The heart sounds were distant and the heart size could not be made out. The liver was not pal-

pable and there was no peripheral edema. Venous pressure 7 cm. to 9 cm. Circulation time 12 sec. Vital capacity 3.0 liters or 70%. Right axis deviation.

Case No. 6—Mr. H.E.W., 61-year old brakeman, complained of bronchitis, chronic, since childhood. For the past two years he has more and more disabling cough, sputum and exertional dyspnea. He is sensitive to dampness, also to dust. He has had little rhinitis. He has lost 15 pounds in two years. Temperature, pulse and respiration were normal. Blood pressure 138/74. He was dyspneic on conversation, but not cyanotic. There was nasal turbinate edema and pallor. The neck veins were not engorged. The chest was fixed in expansion. Breath sounds were distant and there were wheezes and coarse bronchial rales, grade III. The heart sounds were distant and the heart size could not be percussed; no murmurs. A_2 equaled P_2 . The liver was not palpable and there was no peripheral edema. Venous pressure 9 cm. to 10 cm. Circulation time 16 sec. Vital capacity 1.8 liters or 44%.

Case No. 7—Miss J.Q., 57-year old music school teacher, complained of ten years of progressive dyspnea. When first seen in 1942, there was marked dyspnoea and wheezing associated with a respiratory infection. There has been a progression of her shortness of breath up to the point that now it is difficult for her to carry on conversation or to do the slightest exertion such as dressing. Blood pressure 104/70. There was moderate pallor of the skin about the face. Neck veins were not engorged. The chest was held in fixed inspiration and there were wheezes and coarse bronchial rales, grade I. The heart sounds were

rhythmical without murmurs. A_2 equaled P_2 . Venous pressure 4 to 6 cm. Circulation time approximately 15 sec. Vital capacity 1.2 liters Height 65". ECG—Marked right strained pattern.

Case No. 8—Miss B.B., age 39, District Supervisor, Girl Scouts of America, was perfectly well up until a respiratory infection in 1945. Following this infection she noticed that she was short of breath and this has developed gradually to the point of extreme shortness of breath on slight effort. There has been no particular rhinitis and very little sputum. Blood pressure 110/72. Nasal turbinates were normal and neck veins were not engorged. Heart sounds were rhythmical without murmurs; no enlargement. There was an increase in the anterior-posterior diameter of the chest and the ribs were held in fixed inspiration. Breath sounds were distant and there were coarse bronchial rales and wheezing. Liver edge was not palpable. No peripheral edema. Vital capacity 3.0 liters or 91%. Chest expansion 32 to 34 inches.

Group II—Asthmatic Patients with Primary Cardio-Vascular Disease.

Case No. 1—Mr. J.B.P., 69-year old farmer, complained of cough, muco-purulent sputum, dyspnoea. In 1942 he had an x-ray of chest with the diagnosis of "bronchiectasis and a thickened pluera, right." In December 1948 he had a respiratory infection and since that time he has produced from one to two cups of muco-purulent sputum, daily and has had progressive dyspnoea, intractable cough and weakness. On examination, he was obviously fatigued. Blood pressure 144/94. There was nasal turbinate edema

GROUP II
ASTHMATIC PATIENTS
With Primary Cardio-Vascular Disease

Name	Age	Occ	Diagnosis	Ven. Pres.	Vit. Cap.	Circ. Time	EKG	Evaluation
Mr. JBP	69	Farm.	Ch. Bronchitis Bronchiectasis Hypertensive Disease	4 cm. 6 cm.	2.6 L. 64%	22 sec.	Lf. Ax.	Vent— Circ—
Mr. FHR	38	CPA	Ac. Bronchitis Cardiac Asthma	22 cm. 30 cm.	2.8 L. 65%	35.5 sec.	BBB Rt.	Vent Circ—
Mr. MB	50	CPA	Hypertensive Disease Ac. Cor. Occ.	19 cm.		24 sec.	Po Occ.	Vent Circ—
Dr. CEW	53	Drg.	Ch. Bronchitis Bronc. Asthma Emphysema Myocardial Dis.	4.6 cm. 9.0 cm.	2.6 L. 56.0%	38 sec.	LBB	Vent— Circ—
Mr. JFR	56	Stat.	Ch. Bronchitis Bronc. Asthma Cor. II. Disease Diabetes	9.0 cm. 12 cm.	2.2 L. 52.0%	19 sec.	LBB	Vent— Circ—
Mr. LFL	69	Sales	Ch. Bronchitis Bronc. Asthma Cor. II. Disease	8 cm.	2.2 L. 48.0%	23 sec.	Nor Ax.	Vent— Circ—

and redness, grade III, with muco-purulent post-nasal drainage. Neck veins were not engorged. Heart sounds were distant and rhythmical. There were bilateral crepitant rales at the lung bases and distant breath sounds. Coarse bronchial rales with wheezes occurred after cough. There was no peripheral edema. Venous pressure 6 cm. and circulation time 22 sec. ECG—Left axis deviation. Fluoroscopy of chest showed left ventricular enlargement. Vital capacity was 2.6 liters or 64%.

Case No. 2—Mr. F.A.R., 38-year old CPA, complained of wheezing and cough. He had not done well for more than a year and complained mostly of epigastric fullness and discomfort. He developed an upper respiratory infection some five weeks before and since that time has had considerable wheezing at night. Four days before being seen he had a severe attack of asthmatic breathing at night which was relieved by intravenous Amenophlin. There had been no chest pain on exertion and no peripheral edema. Blood pressure 142/90. The patient did not appear uncomfortable on moving about the room or on conversation. There was a slight ashy appearance about the face and ear lobes. Neck veins were not engorged. Lung fields were clear except for faint wheezing after cough. Cardiac apex 10 cm. in the fifth left interspace. Sounds were rhythmical and there was a split first sound. The liver was not palpable and there was no peripheral edema. Venous pressure 22 cm., increasing to 30 cm. on exercise. Vital capacity 2.8 liters or 65%. Circulation time 35.5 sec. ECG—Right bundle-branch block.

Case No. 3—Mr. M.G.B., age 50, CPA, has been a known hypertensive since 1946. There had been a very fast pulse for more than a year. There is moderate exertional dyspnoea but no cough or wheezing. He developed chest tightness with cyanosis and was admitted to the hospital with temperature 102 degrees. There was marked cyanosis about the ear lobes and the neck veins were engorged. There were fine rales and wheezes heard over the entire chest. Blood pressure 100/60 (average blood pressure in health, 180/110). The liver was not palpable and there was peripheral edema. Venous pressure 19 cm. Circulation time 24 sec. ECG—Posterior myocardial infarction.

Case No. 4—Mr. C.E.W., age 53, druggist, complained of increasing dyspnoea with asthmatic breathing for 24 years. For the first ten years most of the difficulty was with respiratory infections during the winter. For the past two or three months he has noticed a marked progression in his symptoms, particularly in terms of weakness and dyspnoea. He was dyspnoic on conversation and there was an ashy hue about the ears. Blood pressure 112/70. Pulse 74. Respiration 18. Nasal mucosa was normal. Chest was held to an expansion and there was an increase in the AP diameter. There were wheezes and coarse bronchial rales, grade II. Heart sounds were distant and rhythmical without murmurs. P₂ was greater than

A₂. Neck veins were not engorged. Liver edge was not palpable. There were very large varicose veins and no ankle edema. Venous pressure 4 cm., increasing to 9 cm. on exercise. Circulation time 38 sec. Vital capacity 2.6 liters or 56%. ECG—Left bundle-branch block.

Case No. 5—Mr. J.F.R., 56-year old statistician, has had perennial bronchitis and bronchial asthma since 1919. He has been diabetic for seven years. He had a coronary occlusion in March 1948 with second occlusion in March 1949. Lately he has been asthmatic to the point of dyspnoea at rest. Blood pressure 144/96. Respiration 18. Nasal turbinate edema and pallor, grade II. The neck veins were not engorged. His chest was markedly emphysematous and there were wheezes and coarse bronchial rales, grade III. Heart sounds were rhythmical except for occasional premature beat. Heart size was not made out. The liver edge was not palpable and there was no peripheral edema. Venous pressure 9 cm., increasing to 12 cm. on exercise. Circulation time 19 sec. Vital capacity 2.2 liters or 52%. ECG—Residual effect of coronary occlusion with interference to intraventricular conduction system.

Case No. 6—Mr. L.R.L., 69-year old retired salesman, complained of rhinitis and perennial bronchial asthma since 1945. During this interval he had attacks of precordial pain on effort, diagnosed as coronary pain. Lately, his dyspnoea had become so severe that exercise was not permissible. Blood pressure 138/92. He was severely asthmatic and uncomfortable. There was nasal turbinated edema and pallor, grade III. Cardiac apex 9.5 cm. in the fifth left interspace. Heart sounds were rhythmical without murmurs. There were wheezes and coarse bronchial rales, grade IV. Peripheral arteries were consistent with age. The liver edge was not palpable and there was no peripheral edema. Venous pressure 8 cm. Circulation time 23 sec. Vital capacity 2.2 liters or 48%. ECG—Essentially normal except for an occasional extra ventricular systole. This man died with apoplexy. Post-mortem not permitted.

This paper is primarily directed at understanding the mechanism in cardio-respiratory disease. This information is a prerequisite to rationally directed treatment.

Treatment of the evolving tracheo-bronchial and lung disease is the first consideration. Expectorants, anti-spasmodics and anti-biotics plus rest are important. At times it is necessary to remove the patient from exposure to dust. If and when pulmonary heart disease has developed all the armamentarium for treatment of congestive heart failure is applicable—digitalis, salt restriction, diuretics, oxygen, and strict rest.

McMichael, J.,⁹ studied the effect of digoxin in individuals with emphysema and right sided heart failure. He reported a fall in cardiac output coincident

to fall in systemic venous pressure. This decrease in pulmonary blood flow was diametrically opposite to the effects sought to improve the emphysematous patient. Ferrer, M. I., and Cournand, A.,¹⁰ reports just the opposite effect of Digoxin with an improvement of pulmonary blood flow and clinical improvement of pulmonary patients in congestive failure. Clinical observation tends to confirm the experimental work of the latter authors.

SUMMARY

The detail study of the cardiac silhouette, ECG, venous pressure, circulation time and vital capacity in cardio-respiratory problems will clarify in a very revealing way the mechanism involved in individual cases. This in turn will allow for more exact prognosis and properly directed treatment.

Individual heart chamber enlargement reflects the burden of work load. The ECG will record hypertrophy and strain patterns.

In right sided heart failure evolving from chronic lung pathology there is an early increase in systemic venous pressure and this is particularly evident in response to exercise. The circulation time is not proportionately increased. This is in contrast to primary left sided failure where back pressure, pulmonary hypertension and consequent right sided failure must precede any increase in systemic venous pressure. Consequently, there is an early increase in circulation

time and a delayed increase in systemic venous pressure in primary left sided heart failure.

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A Practical Method Of Intra-Arterial Transfusion

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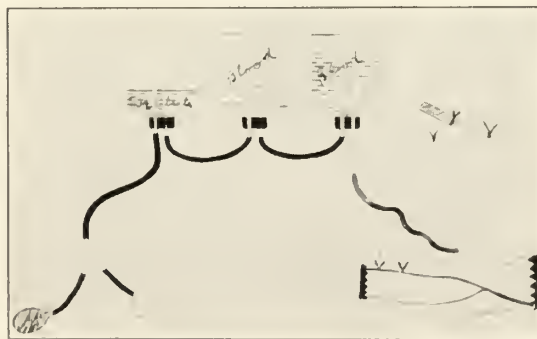
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It is impossible to estimate the limitations imposed upon therapy by the physiologic syndrome known as SHOCK. Our earliest principal evidence of SHOCK is the appearance of a subnormal blood pressure, meaning a lowered circulating blood volume. Experience has shown that this physiologic state must be drastically altered by a restoration of blood pressure to within the normal limits during a relatively short period of time or the intensity of the shock will increase to a point of becoming irreversible. Death, either suddenly or after a period of hours is the result of unsuccessfully treated shock. Many cases of mild shock are regularly treated successfully by the use of vasoconstrictor drugs, cardiac and respiratory stimulants and/or intravenous injection of small amounts of crystalloid solutions, plasma or blood. On the other hand, the instance of severe shock due to hemorrhage, either from an open artery or into dilated splanchnic vessels, intra-arterial transfusion is life saving. The added strain on the heart of trying to pump the blood from a large intravenous transfusion is probably often too great a burden for the anoxic heart muscles. By introducing blood into the arterial system under a pressure of 110 millimeters of mercury, tissue perfusion of vital structures is almost immediately attained. This pressure backing up blood in the arterial tree and forcing it through the coronary arteries immediately increases myocardial nutrition and oxygenation, thus returning its function toward normal. Likewise, vital brain centers have their abilities to function improved and also the blood flow through all organs is increased; that of the lungs, kidneys and liver being particularly important in the instance of an anesthetic intoxication, since they will help the body elimination of toxic doses. Not only may the blood pressure be rapidly returned to normal, but also blood volume is restored in this manner. Pressure transfusion intra-arterially can introduce as much as 1000 cc. in approximately 10 minutes.

To date, apparatus for intra-arterial transfusion has been very cumbersome.^{2&3} Dr. Coppedge¹ of the Ochsner Clinic published a method of intravenous pressure transfusion with a B. D. blood pressure bulb and the ordinary Baxter blood transfusion bottle. It was thought that adding the aneroid blood pressure

manometer to the pressure line with a Y tube, the same apparatus might be used for arterial transfusion. This system was effective but because of only a small air volume the blood in the transfusovac bottle, the pressure fluctuated sharply with each pump of the air intake bulb. By adding an unused transfusovac in tandem to the bottle of blood to serve as air reservoir, an even pressure could be maintained in the transfusing system. In order to keep the transfusion going continuously, a second bottle of blood was added to the line. When the first bottle of blood in the system is emptied, the connecting tubes can be clamped and a fresh bottle of blood or plasma added to the line without interruption of the flow of blood into the patient's artery. If the air pressure exerted in this added bottle of blood is brought up to 110 mm. of mercury before opening the clamp on the tubing leading into the second bottle of blood, the blood will continue to flow without any practical fluctuation in rate.

Our simple apparatus consists of a B. D. blood pressure manometer and bulb, one Y tube, five 16 gauge needles and one blood filter connected by rubber tubing to a #15 silver canula. A sterile packet is maintained in the operating room containing the items enumerated except for the bulb and manometer, which are detached from a B. D. blood pressure apparatus on a moment's notice. Referring to the accompanying diagram, the following instructions are given: (Refer to accompanying diagram).



Detach the B. D. bulb and manometer from the blood pressure instrument, placing them in their indicated respective positions. Connect the Y tube to the empty transfusovac by forcing the needle into the glass air vent tube through the rubber stopper. Join succeeding bottles as illustrated by inserting needles connected by rubber tubing through the

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thick rubber stopper of the first and into the glass vent of the next. Insert the glass blood filter tube into the last blood flask and carefully fill with blood. The filter and attached tubing must be completely filled in order to not force air into the artery through the canula. Under local anesthesia a longitudinal incision one inch long over the radial artery and one inch above the radial styloid is made. The artery is dissected out bluntly. A ligature is tied about the artery in the distal portion of the wound. Another ligature, which is not tied is placed about the artery in the proximal portion of the wound. Half sever the artery and insert the canula, with the tip pointing toward the heart and tie the canula in place by the ligature placed in the proximal part of the incision. Allow the blood to flow, maintaining pressure with the intake bulb between 100 to 110 millimeters of mercury. Care must be taken not to let fluid become exhausted and force air into the artery. If patient is in severe shock, blood will pour through the filter, sometimes as fast as 500 cc. in approximately five minutes. As the blood pressure approaches normal, the blood will flow through the filter at a steady drip or cease. In order to keep the canula clear, force a few drops of blood through it every few seconds. Up to 4000 cc. of blood have been given during an operation with this method.

For obvious reasons, to prevent reactions from blood incompatibilities, we have transfused only identical donor-recipient blood type and irradiated plasma intra-arterially, but if nothing else is available, small amounts of crystalloid solutions could be used beneficially until blood or plasma is obtained.

Examples of the effectiveness of intra-arterial transfusions can be shown by four recent cases:

CASE I

A 30 year old white male with a bleeding peptic ulcer had been transfused many times over a period of a week in an effort to raise his hemoglobin above 50 per cent. He had refused surgery until he realized that blood loss was as rapid as it was given. He was taken to the operating room while intravenous glucose and two blood transfusions were running into his veins. On being anesthetized with ether, his blood pressure dropped to 50/0. Intra-arterial transfusion was started immediately and restored his blood pressure to 110/70 in five minutes and was maintained at this level. The surgeon, without undue haste, performed a gastric resection and anastomosis after securing the bleeding point in a duodenal ulcer. 1500 cc. of blood was given intra-arterially and 1000 cc. intravenously while the patient was on the operating table. The patient returned to his bed with blood pressure of 130/75 as opposed to 110/60 before operation. He maintained this blood pressure and had an uneventful convalescence except for a prolonged wound healing.

CASE II

A middle aged Negro required a resection of one of the metatarsal bones. He was considered to be in good physical condition. A spinal anesthetic 150 mgm. of novocaine was carefully placed in the dural sac without a bloody tap occurring. The patient immediately went into severe shock. The blood pressure was unobtainable, respiratory and complete circulatory collapse was evident. Fifteen minutes later, in spite of artificial respiration with an oxygen mask and the usual emergency therapy of caffeine, adrenalin, coramine and intravenous fluids, the patient had only faint heart sounds present and no blood pressure could be measured. An intra-arterial infusion of plasma was started under pressure and the patient immediately began respiratory efforts. His blood pressure rose to 90/50 at the end of half an hour. At the end of an hour and a half, patient had received 2000 cc. of irradiated plasma into his artery by the same method as described for the use of blood in intra-arterial transfusion. He became conscious and the blood pressure returned to normal with good heart action. The patient was returned to the bed in good condition. Several days later the operation was performed successfully with a different anesthetic agent.

CASE III

A 50 year old white male suffering from a severe case of chronic bronchiectasis required resection of the left lung. The procedure was being done under intra-tracheal anesthesia. An arterial transfusion set was in readiness with the artery exposed, when the patient, in apparently good condition, began to have a cardiac ventricular fibrillation. Arterial transfusion was started immediately and maintained at 110 millimeters of pressure. Respiratory efforts were aided by bag compression to keep the blood oxygenated. Intra-pericardial procaine, intravenous quinidine and coramine were given at intervals in an effort to restore rate and rhythm. During this time the surgeon was using cardiac massage within the chest. In 30 minutes the heart was beating at intervals, regularly but too weakly to be effective and without warning would return to fibrillation. One hour and fifteen minutes after the onset of fibrillation, arterial transfusion was still maintaining the usual signs of life. There was no pupil dilatation and respiratory efforts were still in evidence. The heart was now beating rhythmically, but with no force. The incision in the thorax was closed in layers. One and one-half hours after onset of fibrillation, the pupils dilated and respiratory efforts ceased. 2000 cc. of blood were given intra-arterially during this one and one half hour period of frequent ventricular fibrillation.

CASE IV

A 33 year old white male with a lye stricture of the esophagus and stomach, who had been acutely ill for three months, was being explored for the purpose of an esophageal-gastric resection. Dissection of

the esophagus, because of inflammatory tissue reaction, was bloody. The thoraco-abdominal incision was extensive. During the operation, approximately 45 minutes after it had begun, patient's blood pressure fell and was being maintained at 90/40 with difficulty. Arterial transfusion was started and the blood pressure was maintained at 110 millimeters of mercury, throughout a five and a half hour procedure with 1500 cc. of blood. At the conclusion of the operation the patient was in fair condition. He survived for two weeks after the operation and died of a foul empyema, the result of a slough of the upper end of the esophagus.

DISCUSSION

Intra-arterial transfusion should be employed only in severe emergencies in selected cases. Although profound shock which doesn't respond to any medical treatment is always a positive indication, the procedure works most dramatically in cases of good cardiac reserve which have had acute blood loss.

Ligation of the radial artery probably carries a percentage of risk of ischemic necrosis, which as yet has not been entirely explained. We know that between two to five percent of hands do not have the normal radio-ulnar arterial anastomosis. One writer suggested occlusion of the radial artery by thumb pressure before any operation as a possible test for this anomaly. Another thought on the etiology of ischemic gangrene that occasionally occurs is that infusion of unoxygenated blood into the arm over a sufficiently long period of time may act like a tourniquet; however, it must be remembered that most intra-arterial transfusions flow rapidly for a short period only, then, as needed, in smaller amounts. Cold blood in the radial artery may cause a reflex vaso-spasm of the brachial artery according to one author and he recommends local novocaine infiltration

as a possible aid in preventing the spasm when inserting the canula into the artery. Some writers suggest the practicability of using an arterial transfusion to perform a bloodless operation. For example, in brain surgery, hemostasis is sometimes very difficult. Under anesthesia a phlebotomy could be done, allowing the blood pressure to drop to 90/60. Here the pressure would be maintained by a manometer forcing the blood back into the artery after it was citrated as indicated. Before closing, by raising the blood pressure to normal levels, bleeding points would show and could be secured. Finally, all the blood would be returned by intravenous route when the operation was concluded.

SUMMARY

A simple apparatus for intra-arterial transfusion is described and indications for its use. Four illustrating cases are presented. Possible sequelae of ischemic necrosis of the hand is discussed.

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The Clinical Significance Of Foreign Body Granulomas: A Review

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PART 2

Schistosomiasis.—One of the most important of parasitic diseases is caused by the blood fluke, *Schistosomum hematobium*. The disease is prevalent in North and South Africa, especially in Egypt but also in the Sudan, Ethiopia, the Congo and Rhodesia, as well as in Arabia, Persia, the west coast of India, Madagascar, Puerto Rico and occasionally in Australia and the United States. In some countries, schistosomiasis causes more sickness and death than any other single disease. It has been estimated, for example, that six million of the twelve million inhabitants of rural Egypt are infested with *S. hematobium* and three million with *S. Mansoni* and that at least one and a half million are infested with both species together.¹⁷ Until the year 1926 Cutler¹⁸ was able to collect reports of only twenty-two cases of schistosomiasis occurring in the United States and Canada. However, that the incidence of the disease is apparently increasing in North America is indicated by the fact that since 1933 five cases of schistosomiasis have been subjected to necropsy at Bellevue Hospital alone (Symmers).¹⁹ All of them occurred in Puerto Ricans or in Latin Americans. In two cases the livers showed the naked eye changes of atrophic cirrhosis. Microscopic examination of the liver revealed marked overgrowth of connective tissue in the periportal spaces where it not only surrounded but invaded the lobules, dividing them into smaller islands of cells. In occasional instances, individual liver cells were surrounded by connective tissue in much the same fashion as in the pericellular cirrhosis of congenital syphilis. Lying in the parenchyma were variable numbers of granulomas containing ova. Some of the ova were well preserved, others were in different stages of disintegration, while still others were calcified. The histology of the granulomas varies considerably. In some of them the ova are centrally placed and are partially or almost completely surrounded by multinuclear foreign body giant cells of the Langhans type together with variable numbers of lymphocytes, plasma cells, eosinophiles and polynuclear neutrophils, while at the extreme periphery there are sometimes numbers of circumferentially arranged epithelioid cells, the whole resembling the exudative tubercle in the early stages of repair. In still other instances, the tubercle-like bodies show one or more ova and are practically completely converted into localized collections of poorly cellular fibrous tissue; in other words, the granulomas are apparently healed.

Xanthoma.—The condition known as xanthoma pal-

pebrarum occurs, as its name implies, in the eyelids. It is not uncommon in elderly individuals and is occasionally seen in subjects of diabetes mellitus. On the other hand, the lesion that is called xanthoma diabeticonum is specific and occurs only in patients with diabetes mellitus. In xanthoma palpebrarum the growths are usually multiple, irregular in outline, yellowish in color, slightly elevated above the surrounding skin and are confined, as a rule to the upper or lower eyelids on one or both sides. In xanthoma diabeticonum the growths show a predilection for the regions of the elbows, knees and buttocks. They occur as firm, rounded or oval papules, the apices of which are yellowish and bear a superficial resemblance to pustules, while the bases are pinkish. Still another variety of nodule is known as xanthoma tuberosum multiplex. It occurs in the form of lesions varying from papules to tumor-like growths measuring many centimeters in diameter. According to Rigdon and Willeford,²⁰ 18 cases of sudden death have been recorded in children 16 years of age or younger with xanthoma tuberosum multiplex attended by arterial sclerosis. The most frequent cause of death was coronary occlusion. In a case reported by them, atheromatous plaques were present in the aorta and in the coronary, carotid, innominate and subclavian arteries of a boy 12 years of age in whom xanthomas were located on the extensor surfaces of the right arm, in the subcutaneous tissue of the left arm, in the region of the left elbow and of the corresponding knee and in both buttocks. In all of these three forms of xanthoma, the histologic changes are much the same and are characterized by diffuse overgrowth of connective tissue among which are multinuclear giant cells containing lipid material.

That form of xanthomatosis which constitutes the Hand-Schüller-Christian syndrome is encountered most often in children and in males more commonly than in females. The principal changes consist of defects in the membranous bones of the skull, exophthalmus, diabetes insipidus, and dwarfism. Nodules occur in the bones at the base of the skull, sometimes penetrating to the meninges or perforating the skin. Identical nodular formations in the retro-bulbar tissues are responsible for the exophthalmus and for diabetes insipidus, the latter following pressure on the hypothalamus. In addition, characteristic nodules may be encountered in the mediastinum, the omentum, the adrenals, kidneys, heart, lymph nodes, spleen and liver. Histologically, the nodules are composed of

mature or fibroblastic connective tissue and foreign body giant cells containing lipid material. In the later stages, the growths are almost completely converted into fibrous tissue.

Histoplasmosis.—The disease known as histoplasmosis was first described by Darling in the Panama Canal Zone. He identified the causative agent as *histoplasma capsulatum*. The organism, a species of fungus found in soil, measures from 3 to 5 microns in diameter and contains a round or crescent-shaped, central basophilic body surrounding which there is a clear zone and a refractile capsule. The disease is by no means limited to the tropics but has been described in various parts of the world. During the past decade it has been found to occur widely in the United States, where cases have been observed in Minnesota, California, Iowa, Tennessee, Ohio, Missouri, Mississippi, Maryland, Virginia, Kentucky, Florida, Indiana, Alabama, Texas, Illinois, Washington, D. C., Oklahoma, Louisiana, New York and North Carolina. Parsons and Zarafonitis²¹ encountered nine cases originating in the State of Michigan alone in the interval of 25 months between November 1938 and December 1940. In view of the fact that histoplasmosis may be easily overlooked or misinterpreted, it is probable that it is even commoner than at present suspected. Any age group may be affected but the disease most frequently occurs in males in early life. Clinically, histoplasmosis is manifest in the form of ulcerative lesions of the skin and in the mucous membranes of the mouth, pharynx and intestine, or it may be generalized. Although frequently fatal, recovery is believed to occur, as shown in individuals with cicatrized or calcified pulmonary lesions resembling those of healed tuberculosis. The lesions in histoplasmosis are nodular and vary in size from a few millimeters to one or more centimeters. Histologically, they consist of necrotic centers surrounded by fibroblasts, lymphocytes and parasitized large mononuclear cells. In the more prolonged cases, granulomas may occur in various organs and in them multinuclear giant cells contain variable numbers of the causative organism.

Granulomas of Torulosis.—There is an ill-defined group of pathogenic yeast-like species of fungi listed under the genus *Torula*, in which the organisms do not produce mycelia or endospores but multiply only by the process of budding. Clinically, the organisms often express a predilection for the central nervous system where they sometimes produce symptoms that are suggestive of a new growth or of encephalitis. Similar lesions may occur in the lungs, liver, spleen and kidneys. In man a frequent atrium of infection appears to be in the respiratory tract. Histologically, the torula granuloma is composed of an infiltrate of large mononuclear and plasma cells together with multinuclear giant cells containing spherical foreign bodies or torulae measuring from 1 to 10 micra in diameter.

Pin Worm Granulomas. — *Oxyuris vermicularis*,

otherwise known as the thread, pin or seat worm, is extremely common and its favorite habitat is the colon and rectum. The male measures about 4 mms. in length and the female about 10 mms. The female, which is the more frequent offender, causes intense itching, especially during the nematode's nocturnal peregrinations. From its abode in the intestine, the worm often migrates into the vagina along which it passes to the endometrium, thence through the Fallopian tube to the surface of the adjacent peritoneum. In all of these localities, with the apparent exception of the vagina, it may produce tubercle-like foreign body granulomas composed of lymphocytes, epithelioid and giant cells, the latter arranged in apposition to particles of chitinous material that remain in the tissues following death and dissolution of the parasite. In addition to the localities mentioned, the pin worm frequently invades the appendix where it penetrates the submucosa and initiates granulomas of the foreign body type,²² or it may allow infective microorganisms to follow its path and to set up acute inflammatory lesions.

Pentastoma Granulomas.—*Pentastoma denticulatum* is the larva of *Pentastoma tenoides*, a lancet-shaped animal belonging to the tongue worms or Pentastomidae. It inhabits the nasal, frontal and maxillary sinuses of various animals, especially the dog, seldom in man. The female is from 50 to 80 mms. long and the male from 16 to 22 mms. The larva is found chiefly in the liver, lung or spleen, more rarely in the other organs of man and the herbivora. The eggs are taken in from the external world through the intestinal tract. The parasites set free in the intestine wander by means of a boring apparatus through the mesentery into the adjacent lymph nodes or penetrate directly into blood vessels and are carried to the liver or even to the lung where, after moulting they develop into larvae and are encysted. The larvae in their wanderings may gain access to the nasal cavity of their host and develop into mature animals.

The two species of Pentastomidae or linguatulida that are of clinical importance are *armillifer armillatus* and *linguacula serratus*. *Armillifer armillatus* lives in the trachea and lungs of pythons and other African snakes. When the intermediate host is eaten by a snake the nymphs are liberated and penetrate into the lungs where they rapidly develop into adult forms. Man may be infested by drinking water containing the ova deposited either from the sputum or excreta of the snake. Many cases of human infestation have been reported from West Africa, especially the Belgian Congo, and a few cases from the Orient while in North America, apparently only two examples are recorded, both probably due to a species of parasite peculiar to the rattlesnake. Human infestation by *armillifer armillatus* is sometimes so severe as to occasion illness or even death, (Cannon),²³

In man infestation by the larvae of *linguacula serratus* is not uncommon, especially in Germany, Great

Britain, and certain parts of the American Continent. Osler mentions the case of a patient in Missouri who expectorated between 75 and 100 parasites coming, apparently, from a focus of infestation in the liver and a patient in Canada who expelled the same sort of worm in the urine. The larva of *linguatula serrata* produces localized chronic productive inflammatory lesions characterized by a central area of dead or degenerate parasites surrounded by a layer of epithelioid cells among which foreign body giant cells are formed around amorphous material representing remnants of cuticle shed by the larvae while moulting.²⁴

Sporotrichosis.—Sporotrichosis is an ulcerative mycotic lesion which is usually limited to the skin, subcutaneous tissues and superficial lymphatics, especially of the hand and arm, although it may occur in deeper tissues and may even become generalized. The disease follows infection by any one of the several pathogenic species of the genus *Sporotrichum*. Infection is often attributed to the pricks of thorns and since the disease is encountered in gardeners, florists and those engaged in similar pursuits, it is regarded as an occupational hazard. It is commonest in the United States and in France and Switzerland, although cases have been observed in different parts of South America and Africa. Clinically, the lesions are most commonly those of multiple abscesses that are distributed in linear fashion along the course of the superficial lymphatics. Later the lesions appear as productive granulomas in the multinuclear giant cells of which foreign bodies are present in the form of mycelial remnants.

FOREIGN BODY GRANULOMAS DUE TO INANIMATE SUBSTANCES

Dusting Powder Granulomas.—In reporting the results of an investigation on the pathologic changes produced by the deposition of lycopodium in human tissues, Antopol,²⁵ in 1933, recorded an incidental case of peritoneal foreign body granulomas due to talcum powder that had been introduced as a dusting powder on surgeons' rubber gloves. His observations have since been confirmed and extended both clinically and experimentally by other investigators to include peritoneal adhesions followed by intestinal obstruction and by foreign body granulomas in the rectum, vagina, cervix, testicle, kidney, breast and brain and in healing wounds, so that the implantation of talcum and other dusting powders may be regarded as a surgical menace. The earliest observations on intra-abdominal complications arising from powder in the peritoneum had to do with the use of lycopodium, a genus of evergreen plant colloquially known as club-moss or wolf foot to the spores of which the peritoneum reacts almost exactly as it does to talcum. The nodular granulomas produced by both forms of dusting powder are characterized, histologically, by a matrix of connective tissue scattered through which are innumerable multinuclear giant cells formed around the brilliantly eosinophilic spores of lycopodium or around crystals of talc.

Foreign Body Granulomas of Pulmonary Arteries.—In the routine examinations of microscopic sections of lungs from necropsies over a period of twenty years, Von Glahn and Hall²⁶ observed six cases in which foreign bodies were present in the smaller branches of the pulmonary arteries. These foreign particles were slender, had a greenish tinge, did not stain with the dyes customarily employed in histologic examinations and were doubly refractive. The bodies usually lay against the intimal surface of the artery and, in some instances, were embedded in a collection of large mononuclear cells together with multinuclear giant cells of the foreign body type. When the clinical histories of these patients were studied, one feature was common to all: each had received one or more intravenous injections of physiologic saline or glucose solution or blood transfusions within a period of not more than ten days prior to death. The foreign particles were regarded as fragments of cotton that were contained in the injected solution and that had come either from the gauze through which the solution had been filtered, or from the cotton stopper that adhered to the mouth of the flask. The correctness of this impression was borne out by experimental procedures in which cotton was immersed in physiologic salt solution and cut into fragments of such minute size as readily to be drawn into a syringe through a number 19 gauze hypodermic needle. Suitable amounts of material were injected into adult albino rats. The rats were sacrificed at varying intervals and microscopic examination of the smaller pulmonary arteries revealed granulomas of the same sort as those encountered in human subjects. In arteries of medium size, arterioles, and in precapillary branches, the granulomas were found to distend the lumina and often to escape through defects in the walls of the vessels. The defect in the vessel wall was produced by penetration of the cotton fiber through it and by actual tearing of the wall. At first the gap was filled with fibrous tissue; later, smooth muscle and frequently a new elastica interna was formed while the scar was covered by endothelium. The lumen of the vessel was patent. Some of the cotton fibers ultimately came to lie in alveolar spaces and were surrounded by foreign body giant cells. Neither thrombosis nor hemorrhage was associated with the presence of these granulomas nor did the process lead to infarction of the lungs.

Foreign Body Granulomas in Benign Temporal Arteritis.—The disease known as benign temporal arteritis was first described in 1932 by Horton, Magath and Brown.²⁷ Since that time, Crosby and Wadsworth²⁸ have collected a total of 48 cases, including 4 of their own. The disease involves not only the temporal artery and its branches, but the retinal and cerebral arteries and may even be generalized, as in the cases recorded by Sproul and by Cooke and others. Clinically, it affects individuals of the older age group and is characterized by local changes consisting of painful and tender, red and swollen, nodular areas

corresponding to the distribution of one or both temporal arteries or their branches, and edema of adjacent structures together with the symptoms of fever, malaise and anorexia, loss of weight and weakness. In those patients with involvement of the retinal arteries, blindness is common, having been found in 33.3% of the 48 cases collected by Crosby and Wadsworth. The cause of the disease is not known but by some it is regarded as a local manifestation of so-called polyarteritis or, better, panarteritis nodosa. Recovery usually ensues. Histologically, the lesions consist of granulomas attended by the irregular distribution of epithelioid cells, lymphocytes and multinuclear giant cells. Some of the giant cells contain vacuoles where, apparently, crystalline substances previously existed and were dissolved in the course of preparing sections for microscopic examination. In still other instances, the giant cells are formed around fragments of degenerate elastic tissue.

Granulomatous Mesaortitis.—In 1937 Sproul and Hawthorne²⁹ described an apparently unique disease under the title of chronic diffuse mesaortitis. Since then four additional cases have been recorded by Gilmour³⁰ and one by McMillan.³¹ The disease is clinically silent. In the first case described by Sproul and Hawthorne, clinical observers were totally unaware of any damage to the cardiovascular system. The second case presented the picture of progressive cardiac failure but this was due to sclerosis of the coronary arteries and myocardial infarction. Histologically, the lesion, as its name implies, is confined to the media, thus differing from all other known productive diseases of the aorta. It is characterized by a profusion of lymphocytes and plasma cells together with an occasional multinuclear giant cell arranged around fragments of elastic tissue.

Bagasse Disease of the Lungs.—Sugar cane from which the juice has been extracted is called bagasse. The product is broken, processed and pressed into various shapes for insulating building materials. The dust of the dried grass is an industrial hazard. The disease that follows its inhalation is known under the dubious name of bagasse or even more improperly, perhaps, as bagassosis or bagasseosis. Bagasse disease of the lungs is characterized by cough, dyspnea and hemoptysis, night sweats, chills and intermittent fever. Roentgenologic examination of the chest shows mottling of both lungs, resembling that of miliary tuberculosis. The disease commences insidiously. The pulmonary reactions incited by the inhalation of bagasse dust are reversible and complete resolution may occur. Because the disease is seldom fatal, only rare opportunities have thus far been presented to determine the histologic changes in the lungs. Investigations of this sort have been limited to a single necropsy and to the removal of a few particles of tissue for biopsy. The lesions so far described consist of localized pneumonic areas composed of foam cells together with foreign body reaction around bagasse fibers.

The cause of bagasse disease is still obscure. Some investigators believe it is either a fungus or a bacterial infection, the causative agents being introduced on the surface of the inhaled dust. Others contend that it is a virus disease and still others that it is an allergic response to the presence of bagasse material. Gerstl, Tager and Marinaro³² have approached the subject experimentally and the results are suggestive. Suspensions of five lots of bagasse were administered intravenously, insufflated into the trachea or injected into the skin of rabbits and guinea pigs. Animals receiving intravenous injections of bagasse in suspension showed extensive foci of necrosis and cellular reactions. In addition, the presence of mycelia and spores in the damaged organs served as an indication of the nature of the infective agent. Animals that received injections of autoclaved bagasse revealed only small granulomas in the lungs of the foreign body type. These results suggest that bagasse disease of the lungs is caused by a fungus and that the dust itself is relatively innocuous.

Silica Granulomas.—German³³ has recorded an apparently unique case of foreign body granuloma due to particles of sand. The lesion occurred in a man who fell while mountain-climbing and sustained a laceration of the scalp. The wound was cleansed and healed without further incident until some years later when a nodule appeared in the scar and eventually attained a diameter of 2 cm. Excision and microscopic examination showed a matrix of epithelioid cells arranged in whorls and an occasional multinuclear giant cell in the cytoplasm of which were crystals of silica.

Beryllium Granulomas.—In recent years, beryllium, a light, non-radioactive metal, has been used in the manufacture of x-ray apparatus, radio tubes and fluorescent lamps. The metal is of additional importance because, in some instances, it is capable of inducing acute or chronic pulmonary lesions as well as changes in the skin and subcutaneous tissues. Two forms of pulmonary lesions have been described in beryllium workers: an acute pneumonitis and a chronic form or pulmonary granulomatosis. Acute reactions have been observed only in extraction plants where exposure is largely due to the acid compounds of beryllium, the sulphates and the fluorides. The changes consist of irritation of the upper respiratory tract including the pharynx, trachea and bronchi and occasional cases of acute pulmonary edema, in all of which, however, complete clearing may occur. The chronic phase or pulmonary granulomatosis of beryllium workers commences insidiously and is characterized clinically by shortness of breath, cough, rapid pulse and loss of weight. In some instances the onset may be delayed, cases having been described in which symptoms and signs were postponed as long as five years after exposure to beryllium. Of five cases of beryllium pulmonary granulomatosis described by Slavin,³⁴ one of the patients had been employed in

removing insulating materials from copper wires by means of revolving steel wire brushes. Some of the small copper wires were made of an alloy containing beryllium. The patient was not protected against inhaling the dust scattered by the brushes. Death occurred and necropsy revealed numerous discrete nodules scattered throughout the lungs. On microscopic examination the nodules were found to consist of small granulomas in which the changes resembled those of Boeck's sarcoid. The fibrous elements in the granulomas were concentrically arranged around multinuclear giant cells containing deposits of metallic beryllium. The four remaining patients in the series described by Slavin also worked on radio tubes. Three of them are still living (1949). A fifth patient died but necropsy was not obtained. Histologically identical granulomatous lesions occurring in the skin and subcutaneous tissues as a result of lacerations by fluorescent light bulbs have been described by Grier, Nash and Freiman³⁵ and others.

Riedel's Struma.—The disease known as Riedel's struma, struma fibrosa, ligneous thyroid and iron-hard struma is a chronic productive inflammatory lesion of the thyroid which occurs most frequently in males in the fourth and fifth decades of life. The cause is unknown. Clinically, the thyroid presents an ill-defined area of induration involving one or both sides of the gland and the growth is firm, nodular, painless and often adherent to surrounding structures. Microscopic examination reveals that the area of induration is due to diffuse overgrowth of mature or moderately cellular connective tissue in which localized foreign body granulomas are sometimes formed around masses of degenerate colloid material. The consensus seems to be that Riedel's struma is an independent disease of the thyroid, bearing no relationship, for example, to Hashimoto's struma lymphomatosa, although the opinion has been expressed that the two are different stages of the same disease. In the case described by St. George,³⁶ the growth was excised from his own body and in the course of removal the recurrent laryngeal nerve was injured and the patient was left with partial paralysis of one vocal cord and permanent partial aphonia.

Granulomas in Gout.—The nodular lesions which characterize gout may occur in almost any connective tissue in the body, but are most frequently located in and around joints, especially the metatarso-phalangeal joints, in ligaments, tendons and tendon sheaths and in bursae or, as the so-called tophus that is most commonly seen in the helix of the cartilaginous external ear. The nodules vary in size from those which are relatively negligible to large growths that sometimes penetrate the skin, forming indolent ulcers, particularly around the small joints of the fingers and toes. Histologically, the nodule in gout is a foreign body granuloma scattered through which are variable numbers of multinuclear giant cells arranged in apposition to delicate, needle-like crystals of sodium biurate.

Non-Specific Granulomatous Prostatitis.—Under the heading of granulomatous prostatitis, Tanner and McDonald,³⁷ in 1943, described a localized lesion attended by desquamation of the epithelial lining of the prostatic ducts or acini followed by the escape of secretion into the surrounding tissues and the formation of granulomas characterized, histologically, by collections of epithelioid histiocytes with or without the presence of multinuclear giant cells, some of the latter arranged around the remains of disintegrated corpora amylacea. More recently, Symmers,³⁸ using the title of non-specific granulomatous prostatitis, described identical localized formations in the prostate and, in addition, similar but diffuse inflammatory lesions scattered throughout the substance of the organ. In many instances the changes in both the localized and diffuse varieties of granuloma resembled those of epithelioid tubercles.

Intra-dermal Typhoid Vaccine Granulomas.—In 1943 Tilden and Arnold³⁹ encountered six cases of foreign body granuloma following the intra-dermal injection of triple typhoid vaccine. The lesions occurred at the site of injection in the form of small, shot-like, reddish nodules. Microscopic examination showed a necrotic center surrounded by a zone of histiocytes among which were multinuclear giant cells formed, presumably, around the bodies of dead bacteria.

"Paraffinoma".—The individual who, rather than accept the inevitable, causes or allows paraffin to be injected beneath the skin under the promise or hope of restoring the appearance of youth, is more apt to find that such injections are followed by distressing disfigurement. The results are sometimes so disturbing as to lead to death by suicide. Histologically, the lesions are those of granulomas which eventually become fibrotic or even hyalinized and in which multinuclear giant cells are formed around particles of infiltrated wax.

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CANCER

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THE MEDICAL COLLEGE CANCER CLINIC

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Since January, 1950 eleven papers on the subject of cancer have appeared in this section of the Journal of the South Carolina Medical Association. This, the twelfth paper, is intended to close the first series. It would, therefore, seem appropriate to report on the activities of the Medical College Cancer Clinic in this final article.

This particular clinic has three primary purposes: the diagnosis and treatment of patients with cancer, the teaching of cancer subjects to various groups and the performance and encouragement of research related to cancer. In the former of these functions, the clinic is the same as the seven other state aided cancer clinics in South Carolina. In the latter two func-tions, however, a considerably more extensive pro-gram exists. The educational and research programs rightly involve an appreciable expenditure of time and funds.

The Cancer Clinic is open to patients five mornings of the week. An attempt is made to see the new pa-tients on specific days and the patients returning for re-examination on others. Further, the return patients are grouped into a number of subdivisions, such as gynecology, gastroenterology, etc., and channeled into certain days. This not only enhances teaching but per-mits consultants to see more patients in their particular field of interest in fewer visits to the clinic, a matter of practical importance.

As will be seen on the two maps indicating the county of origin of new patients for 1949 and 1950, the majority of these patients come from Charleston County and the surrounding eight counties known as the Coastal District. From the other counties, a num-ber of patients are received, usually for some type of treatment not available in the other clinics, such as radioactive isotope therapy. In spite of the distance a considerable number of the patients must travel to the clinic, attendance has been remarkably faithful. Of the new patients 85 per cent kept their first ap-pointment. For the return visits, patients did less well but the finding that 78 per cent of the appointments were kept is excellent in view of the fact that many of these patients feel perfectly well and understand poorly the necessity of frequent re-examination. Ad-mittedly, considerable emphasis is given to the im-portance of follow-up visits and much secretarial and visiting nurse time and effort are expended on the follow-up program.

Table 1 shows an analysis of the clinic visits for the years 1949 and 1950. During the latter year 1,190 patients were seen for a total of 4,438 visits to the clinic. Of this group, 198 died and 311 were dis-charged because of the absence of malignancy, or were dropped by reason of transfer to another clinic, moving from the state, etc. A total case load of 681 patients remained at the end of the year.

A comparison of the past two years is of some interest. A 32 per cent increase in total visits is noted. There was a 25 per cent increase in the number of new patients seen. In 1949, however, 55 per cent of

Table 1
CANCER CLINIC PATIENTS

	1949	1950
Old Patients	305	507
New Patients	545	683
Total	850	1,190
Died	149	198
Discharged	225	311
Total	343	509
Total remaining December 31, 1950	507	681
Malignant	525 (new 288)	719 (new 312)
Non-malignant	314 (new 236)	450 (new 330)
Undiagnosed	28 (new 21)	49 (new 38)
Total	867	1,218
More than 1 malignancy	17	28
Total	850	1,190
Total number of visits	3,368	4,438

Table 2
HOSPITAL ADMISSIONS

	No. admissions		No. hospital days	
	1949	1950	1949	1950
Remaining December 31			375	574
January	42	61	788	1045
February	33	49	394	897
March	34	54	442	1104
April	34	60	401	1147
May	37	66	399	1212
June	29	44	459	1113
July	43	58	887	899
August	41	60	654	1384
September	41	46	703	730
October	43	57	806	826
November	46	52	724	798
December	46	37	482	388
Total	469	644	7504	12117

the new patients were diagnosed as having a malignancy, whereas this decreased to 49 per cent in 1950. Stated differently, the increased number of new patients seen shows a definite trend when it is found that there was an 8 per cent increase in new patients with a malignancy compared to a 40 per cent increase in new patients diagnosed as having no malignancy. This increased utilization of the Cancer Clinic facilities for diagnostic services is most desirable from the standpoint of student teaching, early diagnosis and lay education, but presents a serious problem with regard to the financial drain on funds intended for patients with malignancy. Whereas in many cases, a diagnosis

of benign disease can be made with relative ease, some patients require hospitalization, intensive study and even operation for accurate differentiation. Even with the greatest care, occasional malignant lesions may be missed.

Table 2 shows the hospital admissions and the number of hospital days care given these patients. It would be of considerable interest if the patients hospitalized could be grouped into: those with benign lesions, those admitted for terminal care only, those who had only palliative therapy and those whose treatment resulted in reasonable hope of cure. Such a study is now being carried out.

During the year 1950, there was an average of almost two hospital admissions per day. The average length of hospitalization for these patients was 18.8 days, compared to an average hospital stay of 16.0 days for 1949.

Table 3 shows the incidence of various types of malignancy in this clinic. The skin lesions were, of course, mainly in white patients and is the one group in which the white patients decidedly outnumbered the colored. The increased number of patients with carcinoma of the lung is of interest. It has been noted previously that carcinoma of the esophagus was unusually frequent in this clinic, and the incidence these past two years bears this out. As will be noted, more malignant lesions of the esophagus were seen than stomach or colon and rectum. Another point of interest is that nearly as many women as men had carcinoma of the esophagus, whereas in most large series the frequency is much greater in men. A similar discrepancy was noted in the colon and rectum group, where there were considerably more women than men, and in most series the sex distribution is about equal or shows a greater frequency in men. Carcinoma of the cervix is the malignancy seen most frequently in this clinic. The incidence is particularly high in comparison to the number of women seen with carcinoma of the fundus of the uterus. Very few malignant tumors of the ovary are seen. The increased number of patients with leukemia and the lymphoma group is perhaps due to the fact that radioactive isotopes and the newer chemotherapeutic agents have been available at this clinic.

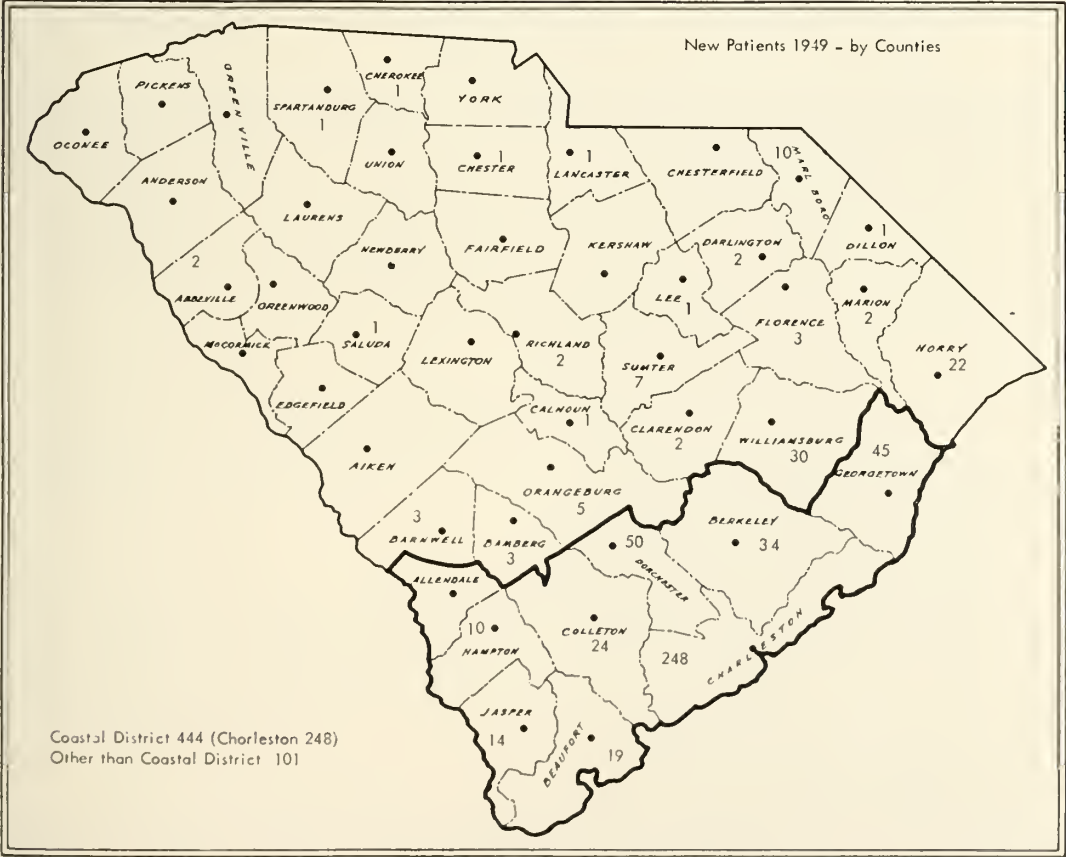
SUMMARY

From the above, some concept of the magnitude of providing facilities for the diagnosis and treatment of indigent patients with cancer can be obtained. During 1950, from a total group of 1,190 patients, 644 required hospitalization, totalling 12,117 hospital days. In addition, obviously, a large number of patients received all or part of their treatment as outpatients. The nature and objective of the treatment given, the unusual incidence of some of the lesions, the stage of certain malignancies and a number of other points suggest problems worthy of more detailed analysis as a larger group is accumulated.

Table 3

INCIDENCE OF VARIOUS TYPES OF MALIGNANCY

	1949				1950			
	New	Total	M	F	New	Total	M	F
Skin	42	84	40	44	40	123	63	60
Lip	4	13	9	4	7	20	15	5
Oral cavity	12	23	11	12	16	27	16	11
Pharynx	4	7	4	3	5	5	4	1
Larynx	3	4	3	1	4	8	6	2
Lung	4	11	10	1	13	18	15	3
Thyroid	4	5	1	4	5	10	2	8
Breast	28	58	1	57	32	80		80
Esophagus	20	30	17	13	15	25	12	13
Stomach	13	20	13	7	14	29	23	6
Colon & rectum	17	24	9	15	13	31	9	22
Cervix	88	154		154	70	191		191
Fundus uteri	1	2		2	2	4		4
Ovary	3	4		4	2	6		6
Vagina	2	2		2	2	5		5
Vulva	3	6		6	4	8		8
Prostate	5	6	6		15	21	21	
Penis	7	14	14		7	17	17	
Bladder	7	10	5	5	5	10	3	7
Kidney	2	3	3		3	5	3	2
Leukemia	5	7	5	2	15	19	10	9
Lymphosarcoma	1	7	7		3	5	3	2
Hodgkin's	1	4	4		2	6	5	1
Other	22	27	15	12	28	46	29	17
Total	298	525	177	348	321	719	258	461



**TEN POINT PROGRAM
OF THE
SOUTH CAROLINA MEDICAL ASSOCIATION**

1. Cooperation

To promote closer cooperation and better understanding between all agencies, groups and individuals concerned with providing and improving medical care for the people of South Carolina.

2. Extension of Medical Care

To study constantly the need and availability of medical care in each county of the State and in the State at large.

To promote plans for providing or improving medical care where is a need, particularly in the rural areas.

3. Pre-Paid Hospital and Medical Care

To make voluntary pre-paid hospital and sickness insurance available to all the people of the State (through Blue Cross, Blue Shield, and commercial insurance policies), and to promote the widespread purchase of such insurance.

4. Care of Indigent

To work with local county and state agencies, and with philanthropic organizations, toward securing good medical care for the indigent.

5. Public Health

To support the South Carolina State Board of Health in its broad program of preventing diseases and of safeguarding the health of our people.

6. Health Councils

To support the State Health Council in its announced program. To sponsor

the formation of a County Health Council in every county of the state, and to encourage our members to support and to work with these organizations.

7. Hospitals

To promote the expansion of present hospital facilities and the building of new hospitals—where there is a definite need.

To strive for highest standards of professional care in the hospitals in the State.

8. Medical Colleges

To support the Medical College of the State of South Carolina and to bend our efforts toward keeping its standards of education on a par with other medical colleges throughout the country.

To promote good nursing education and good nursing care throughout the State.

9. Education of the Public

To acquaint the citizens of the State with regard to the problems of medical care in existence today, to inform them as to what is being done to solve these problems, and to advise with them as to further plans for securing better health and better medical care for the people of South Carolina.

10. Political Medicine

To prevent political control or domination of medical practice or of medical education.

The Journal of the South Carolina Medical Association

EDITOR: Julian P. Price

Florence, S. C.

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8½ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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FEBRUARY, 1951

TO GIVE OR NOT TO GIVE

It is our considered opinion that the practicing physician of today must not only consider the desirability of giving one of the sulfonamides or antibiotics to the patient under his care, but that he should weigh just as carefully the reasons for not giving one of these preparations.

The winter season, with its crop of respiratory infections, is the time when these drugs are prescribed most extensively, and this winter has seen the greatest use of these agents ever. The causes are obvious; they are easy to give, they are relatively safe, the cost is no longer prohibitive, they are the newest weapons in the doctor's armamentarium, and the public expect—at times, insists—that they be given.

That these drugs are doing much good in many cases is certainly true, that they may also be doing harm in numbers of cases is also true, in our opinion. Unwarranted or indiscriminate giving of the sulfonamides and antibiotics at the beginning of every respiratory infection or in the course of an ordinary common cold is to be deplored.

It may render the patient sensitive to a particular drug and render its use at a later time, when it is truly indicated, undesirable; in certain cases, it makes the normal bacteria (and viruses?) of the nose and throat drug-resistant; it tends to cut short the building up of antibodies within the patient which might be of significant value in protecting the patient against subsequent infections.

The practicing physician who wishes to do his best for his patient's welfare, regardless of the patient's demand for the immediate use of one of the "wonder drugs," would do well to constantly ask himself the question, "Is this the time to give or not to give a sulfonamide or an antibiotic?"

Journal) is now functioning efficiently under the chairmanship of Dr. Frank Owens. When one considers the conditions which prevailed in 1941 and 1942 with regard to the induction of physicians into military service and compares them with present conditions, one cannot but realize the progress which has been made in settling this knotty problem.

We wish to congratulate Dr. Owens and every member of the Committee on the work which they are doing. The task which they have is neither small or easy, as those who worked with Dr. W. L. Pressly on Procurement and Assignment problems in World War II, can testify. But it is a job that has to be done if the public is to be protected and if the individual members of the profession are to receive just treatment.

POSTGRADUATE COURSES IN MEDICINE

There is no longer any excuse for a practicing physician to "get into a rut" in the practice of medicine. Post-graduate courses in medicine are being presented at places and times which are easily adaptable to a physician's wishes and needs.

This Journal has tried to keep our members informed as to courses which are available and we would like to call attention to the Postgraduate Course in Cardiology which is being presented by the Emory University School of Medicine in Atlanta, March 5 to 9. Speakers and discussants will consist of the members of the faculty of medicine, and Drs. Paul White of Harvard University School of Medicine and Eugene Stead of Duke University School of Medicine.

Those who are interested should write to the Director of Postgraduate Education, Emory University School of Medicine, 36 Butler St., S. E., Atlanta 3, Georgia.

MEETING OF THE HOUSE OF DELEGATES

Columbia, S. C.

Sept. 10, 1950

COMMITTEE ON MILITARY SERVICE

The Committee on Military Service as established by our House of Delegates (see account of special meeting of House of Delegates in this issue of the

At the request of the Council, a special meeting of the House of Delegates was held in Columbia on

Sept. 10., to consider the creation of a Committee on Military Service.

After the meeting was called to order by the President, Dr. W. R. Tuten, the purpose of the meeting was stated by the Secretary, Dr. N. B. Heyward, and the following recommendations were presented for consideration: (The original resolution had been presented by Dr. J. P. Price to the Council and had been approved by that body.)

The Council recommends to the House of Delegates the creation of a standing committee on military service which shall be composed of a chairman, one member of the Association from each judicial district, with the President, Secretary, and Business Manager of the Association serving as ex officio members.

The members of the committee shall be elected as follows: The council shall nominate three members to serve as chairman of the committee and the election shall be made by the House of Delegates. It shall be understood that further nominations may be made from the floor at the time of the election.

The delegates from the counties in each judicial district shall nominate one or more of their members to serve as the representative from that district on the committee, and the election shall be made by the House of Delegates.

It shall be the duty of this committee to:

1. Compile data relative to every physician in the state—age, type of practice, former military service, etc.
2. To determine the availability of physicians in South Carolina for military service in terms of the needs of the armed forces and of the local populace.
3. Adapt itself to conform with such rules and regulations as may be required so that it can serve as an advisory committee to any Federal Agency which may be established in South Carolina concerning the Procurement and Assignment of physicians.

"The chairman and two members of the committee, elected by the committee, shall serve as an executive Committee."

The Chairman of the committee shall serve as the spokesman for the State Association in matters relative to the Procurement and Assignment of physicians in this state for military service and shall be the nominee of the State Association for state chairman of such agency as the Federal Government might create.

Discussion of the recommendations was extensive and lively. Those who participated were Drs. Joe Cam, O. B. Mayer, Kenneth Lynch, Hugh Smith, N. B. Heyward, J. D. Gness, L. P. Thackston, J. H. Gressette, C. B. Epps, J. P. Price, William Weston, Sr., Furman Wallace, Sam Cantey, J. H. Young, Adam Hayne, W. T. Brockman, O. B. Chamberlain, and Ned Camp.

Some argued that the proposed committee was too large and cumbersome, others contended that the executive committee was not given enough authority. The question arose as to the exact status of the chairman of the committee and how much authority he would have to act without the approval of the entire committee.

The resolution, as presented, was finally adopted with the following amendment:

"The chairman and two members of the committee, elected by the committee, shall serve as an executive committee to act in an official capacity."

The house then entered into the election of the members of the committee, with the following results:

Chairman—Dr. Frank Owens, Columbia
First District—Dr. Lawrence Thackston, Orangeburg
Second District—Dr. Wallis Cone, Williston
Third District—Dr. N. O. Eaddy, Sumter
Fourth District—Dr. Paul Barnes, Bennettsville
Fifth District—Dr. Carl West, Camden
Sixth District—Dr. Roderick Macdonald, Rock Hill
Seventh District—Dr. Leon H. Poole, Spartanburg
Eighth District—Dr. C. J. Scurry, Greenwood
Ninth District—Dr. O. B. Chamberlain, Charleston
Tenth District—Dr. Thos. Gaines, Anderson
Eleventh District—Dr. W. W. King, Batesburg
Twelfth District—Dr. I'On Weston, Mullins
Thirteenth District—Dr. W. W. Edwards, Greenville
Fourteenth District—Dr. G. C. Brown, Walterboro

A committee, appointed by the President, brought in the following resolution, which was adopted unanimously:

"The House of Delegates of the S. C. Medical Association assembled for the purpose of recognizing the national emergency of the present wherein the medical profession is called upon to furnish medical officers in an expanding military organization and for the purpose of providing the cooperation required to make the best possible distribution of the available medical personnel, recalls with deep gratitude the personal devotion of Dr. W. L. Pressly in guiding the profession of the state in the similar emergency of World War II and to this date, and wish to express its thanks to Dr. Pressly for that self-sacrificing service, and the hope of this House of Delegates that in the present national and state emergency, the Association and its agencies may feel free to call upon Dr. Pressly for guidance out of his experience and wisdom."

W. T. Brockman,
Kenneth Lynch,
Lawrence Thackston,
Committee.

It was brought to the attention of the House of Delegates that the term of Dr. L. Emmet Madden of Columbia on the Hospital Advisory Council to the State Board of Health had expired. Upon motion, duly seconded, a resolution was adopted nominating

Dr. Madden to succeed himself on the Hospital Advisory Council, and the Secretary was instructed to send the nomination to the Governor.

Adjournment.

**Minutes of Council Meeting
September 7, 1950, 4:00 P. M.**

The Meeting was called to order at 4:10 p. m. by Dr. O. B. Mayer, Chairman, at the Columbia Hotel, Columbia, S. C. All members present. The minutes of the previous meeting were read and adopted as read.

The floor was then turned over to Dr. W. L. Pressly, as the meeting was called for his benefit. Dr. Thackston, seconded by Dr. Sease, nominated Dr. Pressly for temporary chairman of the Advisory Committee for Procurement and Assignment of physicians in South Carolina. After much discussion by all, this motion was tabled in order to make another motion.

Dr. Hugh Smith, seconded by Dr. J. H. Stokes, then moved that a temporary committee, composed of Dr. Mayer, chairman, Dr. N. B. Heyward, and Dr. W. T. Barron, be appointed to serve until the House of Delegates could be convened to take action. This was passed.

Dr. Julian Price then read a plan for a Committee of Military Affairs to be submitted to a called meeting of the House of Delegates of the South Carolina Medical Association, to take action.

Dr. Price then moved, seconded by Dr. Chapman, that the Secretary be instructed to call a meeting of the House of Delegates at the Columbia Hotel on Sunday, September 16th, at 3:00 p. m. This was passed. Dr. Price then offered an amendment to his plan so that the Chairman and two members, elected from the Committee at large, could be named the Executive Committee.

Dr. Pressly was then nominated for the permanent chairmanship, by Council, of this Committee, with Dr. Chamberlain and Dr. W. T. Barron serving as the other two members. This Committee was to be presented to the House of Delegates, for appointment.

Council adjourned at 6:00 p. m.

Respectfully submitted,
N. B. Heyward, M. D.
Secretary

**Minutes of Council Meeting
Monday, January 8, 1951**

The Called Meeting of Council was held at the Columbia Hotel, January 8, 1951. The Meeting was called to order at 4:00 p. m. by Dr. O. B. Mayer, Chairman. Others present were: Drs. Sease, Tuten, McCants, Price, D. L. Smith, Chapman, Alford, Joe Cain, Jr., Guess, Stokes, Heyward, and Mr. Meadors.

Dr. Price suggested that the minutes of the called meeting of the House of Delegates be printed in The

Journal. It was suggested that the Secretary furnish an abbreviated copy for publication. The Secretary brought out the fact that the copies of the minutes of Council meeting extending over the past several months, had been sent to the Journal but had not yet been published.

Dr. J. K. Webb, Chairman of the State Committee on the Care of the Indigent, then reported in detail, the plans of this Committee. After considerable discussion by Drs. Price and Ben Wyman, and by Mr. Rivers, State Director of the State Department of Public Welfare, it was moved by Dr. Chapman, seconded by Dr. McCants, that the plan be approved by Council and recommended for adoption to the House of Delegates at a Called meeting in the near future, at the discretion of Dr. Tuten, the President. It was left to Drs. Tuten, Webb, Heyward, and Mr. Meadors, to decide on a date for the meeting since a copy of the plan must be provided for each delegate and sent when notices of the meeting go out.

It was moved by Dr. Guess, seconded by Dr. Tuten, that a fee of five dollars (\$5.00) be allowed for filling out the application of the Indigent who wish to come under the benefits of the plan.

Dr. Ben Wyman then discussed and presented the Civilian Defense Plan and furnished copies of this plan for the information of Council. Since the Advisory Council for the Defense Plan would embrace Doctors, Dentists, Veterinarians, and others, it was suggested that each Councilor nominate one man from his medical district to serve on this Advisory Council.

It was moved by Dr. Guess, seconded by Dr. Tuten, that members of the Association in Service at the time the dues are payable, shall be excused from these dues if their local society dues are excused. This shall extend through the time of their terminal leave.

Dr. Stokes, Treasurer, reported that seventy-five members of the State Association have not paid their State dues for 1950 and approximately 275 members have not paid their A. M. A. dues.

It was recommended that the S. C. Medical Association contribute to the fund set-up by the A. M. A. for the purpose of helping needy medical schools. It was also decided to offer for sale to libraries over the State, copies of the history of the S. C. Medical Association, at a price of \$3.50 per copy, the money to be paid into the Association Treasury. This motion was made by Dr. Sease, seconded by Dr. Price.

Adjournment at 6:10 p. m.

Respectfully submitted,
N. B. Heyward, M. D.
Secretary

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

"IN TERMS OF SURVIVAL"

Mr. Stuart Symington, Chairman of the National Security Resources Board, and therefore one of the very top men in current national mobilization for defense, made, in the minds of many of his hearers, the most impressive statements of any heard at the recent Washington Conference of state and national advisory committees to Selective Service.

Mr. Symington appeared before the Conference for only about five minutes, but some of his words will not be forgotten. He wondered if his audience realized the gravity of the situation. Then he said, "I can assure you that it is the most grave situation that the country has ever faced." We have been accustomed, said Mr. Symington, "to think and talk of victory. Now we are thinking in terms of survival."

(Because of its continuing importance, we are carrying in full below the letter with respect to doctor-draft regulations which was mailed to the entire membership of the Association, under date of January 23, 1951.)

WASHINGTON MEETINGS ON DOCTOR-DRAFT

RUSK COMMITTEES DISCUSS PROBLEMS, REACH SOME DECISIONS. In three days of meetings (Jan. 11, 12 and 13) representatives of State Advisory Committees to Selective Service and Dr. Howard Rusk's National Committee discussed doctor-draft and other health service problems and made some policy decisions.

Attending the meetings from South Carolina were: Dr. Frank C. Owens, Chairman; Dr. Ben F. Wynman, State Health Officer; and Dr. Neil MacCauley, representing the Dental Profession; members of the State Advisory Committee appointed by Dr. Rusk; also Dr. Lawrence P. Thackston, Vice-Chairman of the Committee, Dr. Clarence Guyton and M. L. Meadors.

Following are a few of the more important developments at the meetings:

1. It was emphasized that under present plans, all available physicians in Priority I will be called for service (excepting of course those deferred for various reasons) before going into Priority II. In the same manner, Priority II will be exhausted before drawing on Priority III. At present there is no prospect that men in Priority IV will be called to service at any time within the foreseeable future.
2. Federal funds will be available to committees, through Selective Service, for travel, telephones and

clerical help. State Selective Service offices may already have received the budgets.

3. The National Committee will advise state and local committees to contact all 1-A Priority I physicians who have not asked for commissions, urging them to apply for reserve commissions. The National Committee points out that under the doctor-draft law all these men must be called to service before calls are made on Priority II. If these men don't volunteer, and since their services are "obviously needed," the National Committee will "recommend to Selective Service that procedures for selection of special registrants for induction as prescribed in Public Law 779 (doctor-draft) be carried out."

4. Local Committees are advised not to ask Selective Service deferments for Priority I interns applying for residencies, even in the critical specialties. In such cases, the men are to be advised to apply for reserve commissions. Because of special aptitudes, local committees then might want to ask the military to delay orders in a few cases. (The military services are prepared to set up their own specialty training program if this is found necessary.)

5. For purposes of action on hospitals' requests for deferments, the National Committee advises that all time spent after 12 months is to be considered as a residency.

As was pointed out in our recent letter, the State Advisory Committees henceforth beginning with the calls for April 1st, will pass upon the availability of officers called from the reserve units in the same manner as they have done heretofore with respect to those under the doctor-draft Act. The committees' responsibilities in that respect are confined to recommendation as to whether or not it is essential to the welfare of a community that a physician remain at home.

If any physician under the age of 50 who is not a member of any of the reserve components of the Armed Forces, failed to register in either the October 16th or January 15th registrations, he is advised and urged to contact his local Selective Service board immediately. If in doubt as to his status, he should get in touch with Dr. Frank C. Owens, Chairman, or some member of the State Advisory Committee appointed from the South Carolina Medical Association.

In summarizing results of the Washington meeting of state representatives—the chairman and two other members from virtually every state—Dr. Rusk emphasized that the profession should "be proud of where we are today—far ahead of most other fields in planning for the emergency." He noted the many remaining problems, but said machinery was set up for

solving them. Dr. Rusk reminded the state representatives that their responsibilities extended far beyond their roles as advisors on doctor-draft and military reserve problems. He said that shortly nurse procurement committees may have to be incorporated into the basic state committees, and that the state committees will be expected to take major responsibilities in civil defense preparations.

SOUTH CAROLINA DOCTORS REGISTER

According to figures released by the South Carolina office of the Selective Service system, a total of 823 doctors, dentists and veterinarians registered in South Carolina under the provisions of Public Law 779, the so-called "Doctor-Draft Act." Of these, 164 in Priorities I and II, (men who had received medical training at government expense and had served less than 21 months) registered on October 16th.

In the second registration on January 15th, 659 others added their names. All the registrants were under 50 years of age.

Up to January 21st, a total of 85 had been called up for pre-induction examination—all of them from Priorities I and II.

Information at the same time was that of all the doctors so far called, only three had indicated their desire to accept a commission.

INFORMATION ON MEMBERSHIP DUES

The following information on membership dues for the American Medical Association for 1951 has been compiled by the office of the Secretary of the American Medical Association. This has been made available through the Secretary's Letter by Dr. George F. Lull for officers of the American Medical Association and all county and state medical organizations. It was printed in the Journal of the A.M.A., January 6, 1951, and is reproduced here for the interest and information of the members of the South Carolina Medical Association.

1. American Medical Association membership dues for 1951 are \$25.

2. Fellowship dues for 1951 are \$5 and are exclusive of membership dues.

3. American Medical Association membership dues are levied on "active" members of the Association. A member of a constituent association who holds the degree of Doctor of Medicine or Bachelor of Medicine and is entitled to exercise the rights of active membership in his constituent association, including the right to vote and hold office as determined by his constituent association, and has paid his American Medical Association dues, subject to the provisions of the By-Laws, is an "active" member of the Association.

4. American Medical Association membership dues

are payable through the component county medical society or the constituent state or territorial medical association, depending on the method adopted locally.

5. Fellowship dues are payable directly to the headquarters of the American Medical Association, 535 North Dearborn Street, Chicago 10, on receipt of the bill for such dues.

6. A dues paying, active member is eligible for Fellowship and may request such status by direct application to the Secretary of the American Medical Association. Applications for Fellowship are subject to approval by the Judicial Council of the Association.

7. Commissioned medical officers of the United States Army, the United States Navy, the United States Air Force or the United States Public Health Service, who have been nominated by the Surgeons General of the respective services, and the permanent medical officers of the Veterans Administration, who have been nominated by its Chief Medical Director, may become Service Fellows on approval of the Judicial Council. Service Fellows need not be members of the component county or constituent state or territorial associations or the American Medical Association and do not pay Fellowship dues. They do not receive any publication of the American Medical Association except by personal subscription. If a local medical society regulation permits, a Service Fellow may elect to become an active member of a component and constituent association and the American Medical Association, in which case he would pay the same membership dues as any other active member and receive a subscription to THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

8. An active member of the American Medical Association may be excused from the payment of American Medical Association membership dues when it is deemed advisable by the Board of Trustees, provided that he is excused from the payment of full dues by his component society and constituent association.

The following may be excused in accordance with this provision: (a) members for whom the payment of dues would constitute a financial hardship as determined by their local medical societies; (b) members in actual training for not more than five years after graduation from medical school, and (c) members who have retired from active practice.

9. Active members of the American Medical Association are not excused from the payment of American Medical Association membership by virtue of their classification by their local societies as "honorary" members or because they are excused from the payment of local and state dues. Active members may be excused from the payment of American Medical Association membership dues only under the provision described in paragraph 8 above.

10. American Medical Association membership dues include subscription to THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. Active members of the Association who are excused from the

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RESEARCH IN THE SERVICE OF MEDICINE



payment of dues will not receive THE JOURNAL except by personal subscription at the regular subscription rate of \$15 a year.

11. Member Fellows may substitute one of the specialty journals published by the Association for THE JOURNAL, to which they are entitled as members. A Fellow who substitutes a specialty journal will not receive THE JOURNAL.

12. A member of the American Medical Association who joins the Association on or after July 1 will pay membership dues for that year of \$12.50 instead of the full \$25 membership dues.

13. An active member is delinquent if his dues are not paid by December 31 of the year for which dues are prescribed and shall forfeit his active membership in the American Medical Association if he fails to pay the delinquent dues within thirty days after the notice of his delinquency has been mailed by the Secretary of the American Medical Association to his last known address.

14. Members of the American Medical Association who have been dropped from the Membership Roll for nonpayment of annual dues cannot be reinstated until such indebtedness has been discharged.

15. The apportionment of delegates from each constituent association shall be one delegate for each thousand (1,000), or fraction thereof, *dues paying active members of the American Medical Association* as recorded in the office of the Secretary of the American Medical Association on December 1 of each year.

CIVIL DEFENSE

The South Carolina Civil Defense Plan released within the past few weeks, places full responsibility regarding public health and medical care services on the State Board of Health. This phase of the defense activities will be headed by Dr. Ben F. Wyman, State Health Officer, and will call for cooperation on the part of physicians throughout the State.

The plan was presented to Council by Dr. Wyman on January 8th, and the method of its operation briefly outlined. Present plans call for an advisory council from the State Medical Association, and it is designed that members of the Council will render staff assistance to the extent that they will coordinate medical care services in their Districts.

It was decided that each member of the Council of the State Medical Association will appoint one physician to serve in his District, and Dr. Wyman's office will be notified of these appointments in the near future. The District representative in turn will be requested to appoint a physician to serve for each county in his District. The county members will be expected to serve as coordinators of medical care services in their respective counties.

It is the plan of the State Administrator for this phase of civilian defense to keep all of the physicians

appointed in these capacities fully informed regarding civil defense activities at the State level in order that they may be of greatest service to the county medical societies in the development of county and municipal civil defense plans.

In view of the fact that both the state and the nation have been extremely slow in getting properly organized for civilian defense, it is especially important that the plan formulated and now being set up be given the fullest cooperation by all members of the public when called upon. The medical profession will occupy one of the most essential positions if the time ever comes when it is necessary for the plan to be put into effect. It will be too late then to set up an organization and familiarize ourselves with specific duties. The time to prepare for such an eventuality is now. All physicians who may be called upon to assist in any phase of the civil defense plan are urged to cooperate fully with the State Health Department and the Civil Defense Director's office.

A. M. A. EDUCATION FOUNDATION FORMED

Articles of incorporation for the formation of "The American Medical Education Foundation" have been issued by the Secretary of State's office in Springfield, Illinois. The papers were dated December 20, 1950.

The purposes for which the corporation was organized are:

"To promote the art and science of medicine and the betterment of public health by providing or aiding in the providing of financial aid to recognized schools or institutions of medical education responsible for the education and training of the medical manpower of the United States;

"To distribute funds, monies or contributions to medical schools and institutions;

"To determine the amount, manner and conditions in which and under which available funds will be distributed or granted to eligible schools or institutions."

The board of directors of the new not-for-profit corporation will consist of 11—several members of the A.M.A. Board of Trustees, and several members of the A.M.A. Council on Medical Education and Hospitals.

When the funds are distributed to the medical schools there will be no strings attached. This was made clear last December when the A.M.A. Board of Trustees first took action in initiating such a fund.

Incidentally, the A.M.A. has made application to the U. S. Department of Internal Revenue, requesting that donations to the fund be made tax exempt.

The foregoing information was released in a letter from the Secretary of the A.M.A. early in January. A subsequent report calls attention to the contributions already coming in for addition to the fund and the apparent assurance of its growth.



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Lactogen contains all the ingredients of a well-balanced infant formula. In addition, it is fortified with iron to compensate for the deficiency of this mineral in milk.

Easily Prepared... Merely Add Water

Lactogen is simple to use. The prescribed amount is stirred into warm, previously boiled water. Either a single feeding can be prepared, or the entire day's quantity can be made up and stored in the refrigerator until used.

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The Board of Trustees, in establishing the fund, expressed the hope that the Association's contribution would be greatly augmented by gifts from many other sources and urged all members of the A.M.A. to contribute.

It is planned that the Foundation will coordinate its activities closely with other major efforts to raise funds for medical education by voluntary means. Further announcement along this line is expected shortly.

FAVORABLE PRESS REACTION

The A.M.A. Board of Trustees' action in setting up the half-million dollar fund for aid to medical education, got favorable reaction from leading newspapers over the country.

The Cleveland Plain Dealer (Dec. 8th), in the city where the announcement was made, expressed its views thus:

"The American Medical Association would not possibly spend money from its national education campaign fund any better than by allocating it, without strings attached, to accredited medical schools, which are hard-pressed financially.

"Announcement that the A.M.A.'s governing body, the House of Delegates, had voted \$500,000 in subsidies to 79 schools of medicine was made at the clinical session of the association, here in Cleveland.

"This is aid to medical education from the right source, from the medical profession itself, instead of from the federal government; for the inevitable concomitant of federal subsidy is a steadily increasing measure of federal control.

"The action by the A.M.A.'s House of Delegates is heartening. It should be copied by all who are concerned with the preservation of medical education, inquiry and research unfettered by government regulation.

"Medical education in this country badly needs unrestricted operating funds and endowments, so that the administrators of medical schools may use those funds in the way in which they believe mankind will

be most benefited and the nation best assured of fully qualified medical and surgical practitioners.

"We like to regard such action by the A.M.A. as the beginning of the doctors' own subsidy to medical education, as evidence of new progressivism and enlightenment in the association leadership. The A.M.A. is fully justified in raising funds to combat socialization of medicine, but it should not use those funds wholly in a propagandistic and negative way. Its \$500,000 grant to the medical schools, which was described as 'the nucleus of a fund which we hope will be greatly augmented by contributions from many other sources,' is a wise and proper expenditure."

The St. Louis Post-Dispatch (Dec. 7th) said:

"Whether it will be possible in fact to meet the requirements from private funds remains to be seen. But the A.M.A. has given a challenge to those Americans who agree with it that such help must come from private, instead of public sources. Individuals, corporations and philanthropic funds now have a chance to convince the doubters. And meanwhile the A.M.A., under fire recently because it spent \$1,000,000 in the last political campaign, has earned congratulations for taking its most progressive step in years."

And the Los Angeles Times (Dec. 9th):

"The move of the American Medical Association to set up a fund for the support of private medical schools, to head off further Federal subsidies which the doctors deplore, is interesting and laudable. Government has moved into many new fields for the reason, or at least on the pretext, that private sources were insufficient.

"Whether the doctors can raise the kind of money required to maintain modern medical schools is another question.

"If doctors and other citizens who recognize the dangers inherent in increasing Federal financing of education would support private educational institutions with adequate gifts and bequests, the trend might still be arrested. But here are not enough millionaires left to do it; the money must come from middle-income men who are willing to pay for what they profess."

Dr. J. I. Waring, Charleston pediatrician, has been appointed associate director of the Division of Maternal and Child Welfare and Crippled Children of the State Board of Health. He gave up his private practice January 1 to assume his new duties.

NEWS ITEMS

Dr. Preston Edwards, formerly health officer in Horry County, has opened offices in Darlington for the practice of ophthalmology.

Dr. W. Lawrence Salter, formerly of Hampton, has moved to Spartanburg and is associated with the Mary E. Black Memorial Hospital.

Dr. A. P. Duff has opened offices in Greenville for the general practice of medicine.

At the second annual meeting of the South Carolina Academy of General Practitioners, Dr. T. G. Goldsmith of Greenville, was elected president.

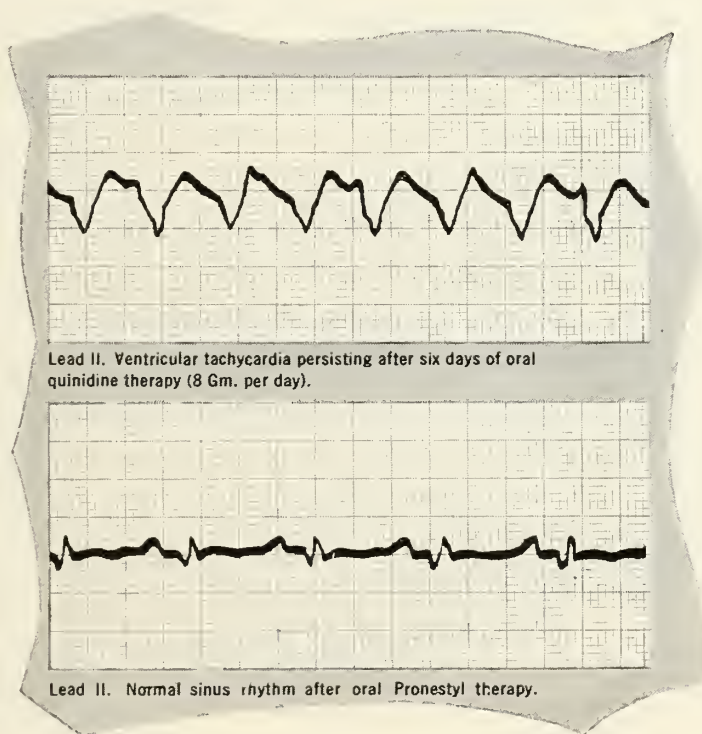
Dr. C. R. F. (Dick) Baker and Dr. L. B. (Bo) Keels have formed a partnership in Sumter for the practice of surgery. Both are Diplomates of the American Board of Surgery.

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SQUIBB MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

Dr. John B. Truslow, formerly Assistant Dean of Columbia College of Physicians and Surgeons became Dean of the school of medicine January 1. Dean Truslow succeeds Dr. Harvey B. Haag, who resigned in order to give full time to teaching and research in the department of pharmacology of which he has been head for many years.

Dr. Harry Lyons, Professor of Periodontia and Oral Pathology, was made Dean of the school of dentistry January 1, succeeding the late Dr. Harry Bear. Doctor Lyons retired from private practice in Richmond in order to accept the deanship on a full-time basis.

At its Commencement in June the college will confer upon State Senator Lloyd C. Bird, a graduate of its school of pharmacy, the honorary degree of Doctor of Laws. Miss Nora Spencer Hammer, a graduate of its school of nursing, will receive the honorary degree of Master of Science in Nursing. Both have made wide contributions to education and to science in the community and the Commonwealth.

The Forty-Fifth General Hospital, sponsored by the college in World Wars I and II, has been reorganized

and becomes an Organized Reserve Training Unit in the Virginia Military District. Colonel John Powell Williams, Professor of Clinical Medicine, and Chief of the Medical Service at McGuire Veterans Hospital will be in command.

Miss Louree Pottinger has been appointed Director of Nursing Service and Associate Professor of Nursing, replacing Miss Margaret Denniston who resigned January 8.

Dr. Frederick M. Salisbury joined the faculty on February 1 as Assistant Professor of Denture Prosthesis.

A splendid attendance was noted at the symposium on alcoholism held January 16 and 17. The alcoholic clinic at the college is under a joint program with the Virginia Board of Health.

A portrait of the late Dean Harry Bear of the school of dentistry was presented to the college with appropriate ceremonies on January 27. The portrait is the work of David Silvette of Richmond, and is the gift of friends of the late Dean.
February 2, 1951

WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. A. F. Burnside, Columbia, S. C.

Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.

The Charlesten Branch of the Woman's Auxiliary to the South Carolina Medical Association has gotten off to a good start on what promises to be a busy year.

The first board meeting was held on Thursday, October 12th, at which time plans and program for the year were discussed, and decided upon. Our theme is to be a continuation of the Nurse Recruitment Program.

Miss Ruth Chamberlin, President of District Nurses, was guest speaker at the first regular meeting Tuesday, October 24th, in Annex-A of the Nurses' Home. She asked that the Auxiliary again offer the scholarship to a worthy student-nurse and suggested that if further funds were available, they could be used to good advantage by other students who need financial aid. Miss Chamberlin also told of the need for the redecoration of a reception room for nurses in the old Riverside Hospital. After discussion a committee was appointed, with Mrs. Bachman S. Smith, Jr., chairman, to proceed with the business of redecoration. Immediately there could be heard the merry hum of portable sewing machines and happy voices, as the committee went forward, measuring, pinning, basting and stitching the brightly colored materials for slip covers and curtains. With the aid of a handyman a window-box was built and supplied with plants from the ladies' gardens. Lamps, pictures, waste paper baskets, ash trays and other items were purchased. Two weeks later the work was finished, and the bare cold-looking room, which was once an operating room, had been transformed into a beautiful and inviting recreation-living room where the girls may leisurely relax, or proudly entertain.

On Tuesday, November 21st, the Auxiliary held a luncheon meeting at Henry's restaurant. We were particularly privileged at this meeting to have as the guest-speaker, Mrs. Alfred F. Burnside, President of the State Auxiliary. Mrs. Burnside outlined practical methods for combatting Socialized Medicine, and said that the Auxiliary should assist the Doctors in the fight for three reasons: For the nation's health, for economics, and for the Medical Profession.

A benefit bridge party to raise money for the Nurses' Scholarship fund, has been set for January, and plans for a party honoring our husbands on

Doctor's Day in March, are going forward.

Mrs. Clay W. Evatt, President

The Pickens County Medical Auxiliary held their December meeting at the home of Mrs. J. H. Cutchin with Mrs. T. P. Valley and Mrs. J. W. Potts as co-hostess.

Mrs. Roy Gaston, President, called the meeting to order, and welcomed as guest, the State President, Mrs. A. F. Burnside and Mrs. Emmet Madden, both of Columbia.

Mrs. P. J. Moore led the devotional, concluding with prayer.

A business session was conducted and a vote was made to send cards to our doctors in service. Christmas remembrances were sent to the hospital at Six Mile.

T. B. pictures are to be shown in High Schools during January.

Mrs. Burnside was guest speaker and told interestingly of auxiliary work.

The Christmas tree for members was enjoyed and gifts were presented to the guest.

After the meeting the hostesses served a buffet luncheon.

Mrs. W. B. Furman
Publicity Chairman

BULLETIN

Your Bulletin Chairman has received subscriptions from the local Bulletin Chairman, getting reports from most of them. The response has been good but not good enough. All members of the Auxiliary are urged to subscribe. Just one dollar per year will make you an informed member of the Auxiliary. We need this information. Please contact your local Bulletin Chairman and tell her you want to subscribe.

To the Chairmen let me say, "Contact your members. They will probably subscribe if asked to do so."

(Mrs. E. O.) Mary P. Hentz
State Bulletin Chairman.

A card party and luncheon were enjoyed by members of the Woman's Auxiliary to the Columbia Medi-

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1. Waxler and Schack, J.A.M.A., 143:736 (1950).
2. Bubert and Cook, Bull. Univ. Maryland Medical School, 32:175 (1948).
3. Paul and Montgomery, Jnl. Iowa State Medical Society, 38:237 (1948).
4. Krantz, Holbert, Iwamoto and Carr, J.A.Ph.A., 36:148 (1947).

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cal Society Tuesday, January 9, at the Forest Lake country club.

Bridge and canasta were played during the social hour and Mrs. J. E. Boone won the door prize, a lovely potted plant.

Tables for luncheon were attractively decorated with arrangements of magnolia leaves. Mrs. John Holler is chairman of the decorating committee.

A number of books were collected by members for the nurses' library at the Columbia Hospital.

A short business session was held after lunch. Mrs. R. Wilson Ball, president of the auxiliary announced that the next meeting of the auxiliary would be held

Tuesday, March 13, at which time officers will be elected for 1951-52. Mrs. Izard Josey was appointed chairman of the nominating committee and serving with her will be Mrs. William Weston, Jr., and Mrs. Gerald Scurry.

A request was made for volunteers for the March of Dimes campaign, by Mrs. Gordon Seastrunk. Anyone wishing to volunteer for this work was asked to call Mrs. Hugh Wyman, public relations chairman.

After the business session an interesting movie of the recent American Medical Association convention at San Francisco was shown by E. S. Powell of the State Board of Health staff.

DEATHS

CHARLES B. SKINNER

Dr. Charles B. Skinner, 30 years old, died enroute to a Hartsville hospital on the afternoon of January 3. He had been partly confined to his home for several weeks with a virus infection before his untimely death.

A native of Lee County, Dr. Skinner received his education at Bishopville High School, Duke University and the Medical College of the State of South Carolina (Class of 1944). He interned at the University of Maryland Hospital in Baltimore before serving in the Navy during World War II. He had practiced in Hartsville since his discharge from the Navy.

Dr. Skinner is survived by his parents, Mr. and Mrs. J. C. Skinner of Lee County and two sisters.

EUGENE HOBART KING

Dr. E. Hobart King, 54, was instantly killed January 7 when his car collided head on with another vehicle near Hartsville.

Dr. King was born in Darlington County and received his education at Wofford College and the Medical College of South Carolina (1924). For the past twenty-five years he had practiced in Hartsville. He was a veteran of World War II.

Survivors include his widow, the former Miss Grace Lee, his mother, four brothers and one sister.

PERRY MARTIN WORKMAN

Dr. Perry M. Workman, 43, died on December 26 as a result of burns received when his bed where he was sleeping caught fire at his home in Lyman.

A native of Woodruff, Dr. Workman was graduated from the Medical College of South Carolina in 1932. He was practicing in Lyman at the time of his unfortunate death.

Dr. Workman is survived by his mother, one sister and two brothers.

JOHN W. DOUGLASS, SR.

Dr. John W. Douglass, Sr., retired physician of Winnsboro, died January 3 in a Greenville Hospital following several months of ill health. He had been critically ill for a week.

Dr. Douglass, 78, was the son of the late Dr. and Mrs. Thomas G. Douglass. He attended Columbia University and was graduated from the Medical College of South Carolina. For a good many years Dr. Douglass was narcotics inspector for the state of South Carolina. Later he moved to Winnsboro where he practiced until his retirement in 1941.

Dr. Douglass is survived by his widow, a son, Dr. John W. Douglass, Jr. of Greenville, and a daughter.

South Carolina Medical Association

1950-1951

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	(Spartanburg, Union, Cherokee)	
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SOUTH CAROLINA MEDICAL ASSOCIATION COMMITTEES 1950-51

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Acute Infectious Laryngotracheobronchitis*

A STATISTICAL STUDY

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One of the most fulminating of all acute infectious diseases seen in infancy and childhood is acute laryngotracheobronchitis. The first accurate description of this disease was made in 1823 by Bland.¹ In 1912 Jackson¹ gave the first account that was noted in the American Medical Literature. Since that time many reports and descriptions of this entity have appeared. The suddenness of onset, the severity and the high mortality rate have always made this disease a challenge to the clinician; and it has only been since the advent of chemotherapy and antibiotics that we have begun to make inroads into its staggering mortality.

From January 1944 to January 1949, 202 cases have been diagnosed as acute laryngotracheobronchitis at Children's Hospital. Included in this group because of the similarity of symptoms, course and treatment were 9 cases of acute epiglottitis. We are attempting a statistical study of these cases and a brief review of the literature in order to point out again the salient features of this disease and to discuss the treatment and mortality in order that we might better organize a team to continue to force down its decreasing mortality.

The diagnosis of laryngotracheobronchitis is difficult to substantiate. It is generally given a group of symptoms. As a result thereof there would be a wide variation in degree and laxity in making the diagnosis. In studying the charts of the patients admitted here during the last five years, it was difficult to determine which should fall in this category because of the large number of different observers and the rarity of confirmatory laryngoscopic examinations. We have set up as the criteria for making this diagnosis, the history of rather sudden onset, inspiratory difficulty, hoarseness, croupy cough, evidence of obstruction to the airways and progressing severity of symptoms. Since many cases did not fulfill all of these requirements, and since there is a great variation in severity of this disease, they were divided into three categories, mild,

moderate, and severe. Those who did not manifest severe respiratory distress, who responded within 24-48 hours to therapy and who were discharged within 5 days were classified as mild. Those cases with severe progressive respiratory distress and who responded to therapy without operative intervention were classified as moderate. The cases that progressed to tracheotomy and those that died were classified as severe. See figure 1.

Mild	56
Moderate	99
Severe	47

Fig. 1. Classification of cases according to severity.

Etiology: Many different bacteria may cause this clinical picture. Davies² reports streptococcus hemolyticus, staphylococcus aureus, and pneumococcus as the most frequent pathogens seen. Mac Cready³ considers B.influenza most important. Walsh⁴ incriminates staphylococcus aureus, and Jackson⁵ streptococcus hemolyticus in 85% of his cases. Rabe⁶ reported the most frequent etiologic agents in his series as virus, H.influenza and C.diphtheria. From his evaluation of symptoms, blood picture, bacterial flora of the pharynx, and response to treatment, he feels that most cases who were formally considered to be due to H.streptococcus, staph. aureus, and pneumococcus might easily be classified under viral etiology. We have made no attempt to add to or detract from his conclusions. Of the cases seen here 124 cultures were taken on admission. Table I lists the important pathogens found in order of their frequency.

Hemolytic Streptococcus	22
H. Staph. Aureus	21
Pneumococcus	10
C. Diphtheria	7
H. Influenza	6

Table I. Organisms found on culture in order of frequency.

*From the service of Dr. Joseph Wall Children's Hospital, Washington, D. C.

The remainder of these cases might well be due to viral infections as described by Rabe.⁶

Age incidence: Even though this disease may infrequently be seen at any age, it is most commonly seen in children under three. Copeland⁷ states that in the very young, the anatomy of the respiratory tract with the small caliber of the bronchial components, the imperfectly developed cartilages, the redundancy of mucus membrane, the superabundance of lymphoid tissues and the extreme vascularity of all structures tend to add to the hazards of this age. Likewise the lack of natural immunity except artificially induced against diphtheria probably plays some part. Of 202 cases 183 were three years or under and 19 were over three. The youngest noted was 7 weeks old, and oldest was 9 years old. See figure 2. For some unknown

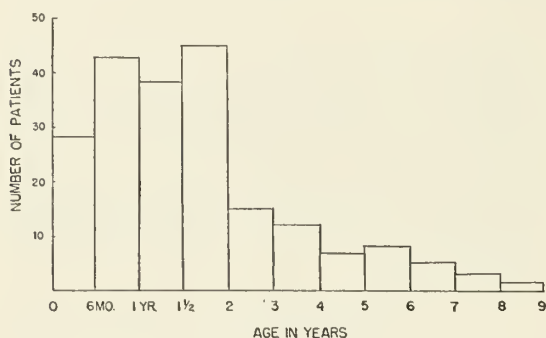


Fig. 2—Breakdown of Cases According to Age.

reason there was a predominance of males in this series, 146 against 56 females. Likewise there were 160 white patients and 42 colored. These results seem to be duplicated by practically all large studies.

Like all respiratory diseases the highest incidence is seen in the winter months, reaching its peak from November to March and then tapering off. See figure 3.

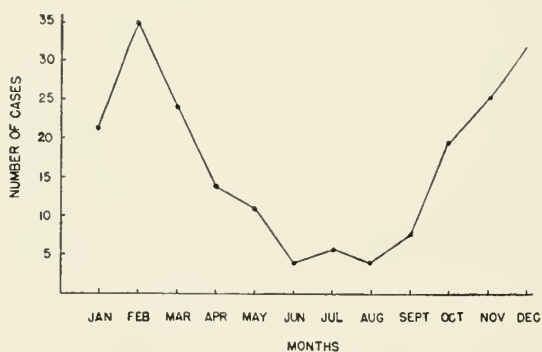


Fig. 3—Monthly Incidence of Cases.

Pathology: Definite bacteriologic and pathologic correlation in laryngotracheobronchitis has not been described in the literature to any great extent. This is due to the fact that until recently there was not too much agreement of the entity. There also has been

little recognition of the bacteriologic etiology in the disease because of the lack of knowledge of the normal flora of the upper respiratory tract in children. Even with this knowledge no conclusion can be drawn unless in each group of cases a pattern of complete cultures is obtained. Then it is also evident that the presence of a potential pathogen may not necessarily indicate that it is the causative agent. It is agreed upon that the three most common pathogens found in laryngotracheobronchitis are *C. diphtheria*, *H. influenza* and hemolytic streptococcus.

In the series of cases under discussion no remark further than the fact that some potential pathogens were recovered in the majority of patients, can be made. Due to the lack of multiple histologic sections of the upper respiratory tract it is not possible to associate the bacteriology with the pathologic findings.

The pathology found in the sections from these cases does however fit the classical description of other authors. Involvement of the epiglottis, larynx, trachea, bronchi, bronchioles and alveoli is the basis of the altered pathologic physiology. Rabe describes in detail the principal difference in the pathology of so called "virus" influenza and diphtheritic croup. He states that particular to *H. influenza* and absent in "virus" croup is the frequent occurrence of marked to extreme supraglottic edema with epiglottitis, severe degeneration of the mucous glands of the laryngotracheobronchial tree early in the disease and the occurrence of mucosal ulcerations secondary to submucosal abscesses. Diphtheria differs from the two with the presence early of a thick gray adherent membrane which forms at the pharynx and spreads downward, early degeneration of the mucous glands of the respiratory tract and more important changes outside of the respiratory system.

Symptoms: The clinical manifestations vary considerably in different patients. There is usually a history of mild upper respiratory infection with sudden onset of fever associated with hoarseness, cough and marked prostration. Dyspnea soon becomes evident. Initially the respiratory difficulty is mainly inspiratory due to the supraglottic edema,⁸ but the distribution of the viscid secretions through the smaller bronchi is soon responsible for expiratory embarrassment as well. The cough may assume a croupy character. The bronchial secretions may be so extensive that they may obstruct the bronchial tree. With increasing edema of the laryngeal structures the dyspnea increases. The higher the obstruction is in the respiratory tract, the greater are the retractions. Table 2 shows the symptoms and signs noted here in order of frequency.

Mortality: There were a total of 28 deaths during this period, a total mortality of 13.8%. However, if the mortality rate was compiled on the basis of the severe cases (47) as done by some authors, the mortality rate would rise to 59.5%. Since so many

Retractions	190
Pharyngitis	172
Fever (above 101)	162
Hoarseness	132
Croupy cough	140
Cherry red epiglottis	9
Membrane	8

Table 2. Symptoms and signs in order of frequency.

cases were admitted in extremist, it was decided that a corrective mortality would be necessary to give a better indication of the result of therapy. We have decided to use eight hours as the base line in formulating the true mortality. Since 16 deaths were under eight hours, the overall rate would be 5.8% and the limited rate (sevcre cases would be 25.5%. The following table will show the true and corrected mortality by year.

	1944	1945	1946	1947	1948
Total Cases	30	28	27	52	65
Deaths	5	3	5	4	11
Deaths under 8 hrs.	2	2	3	4	5
Total Mortality	16.6%	10.7%	18.5%	7.6%	16.9%
Corrected Mortality	10 %	3.5%	7.4%	0%	9.2%

Table 3A. Mortality all cases.

	1944	1945	1946	1947	1948
Total Cases (severe)	7	6	6	9	19
Deaths	5	3	5	4	11
Deaths under 8 hrs.	2	2	3	4	5
Total Mortality	71.4%	50 %	83.3%	44.4%	57.9%
Corrected Mortality	42.8%	16.6%	33.3%	0%	31.6%

Table 3B. Mortality severe cases.

The following chart adopted from Orton¹⁶ will compare these mortality figures with others in the literature.

Author	Cases	Mortality	Year
Baum	24	41 %	1928
Gittens	32	39 %	1936
Smith	43	41 %	1936
Richards	28	40 %	1937
Brenneman	45	42 %	1938
Orton	62	28 %	1940
Davison	17	11.7%	1940
Howard ¹⁰	44	6.3%	1940-43
Howard (severe)	20	35 %	1940-43
Davison ¹⁹	52	0 %	1944-48
Children's Hosp.	202	13.8%	1944-49
Children's Hosp. (severe)	47	59.5%	1944-49

Chart 1. Mortality rates from literature.

Of the total number of deaths 7 were diagnosed as acute epiglottitis, and all died within 7 hours after admission to the hospital. The average length of time in the hospital of these cases was 2 hours.

Even though this disease is most common under 3 years of age, a check of these figures reveals the interesting fact that the mortality rate is highest above this age. Figure 4 shows the mortality rate per year of age, and figure 5 shows the percent mortality of these age groups.

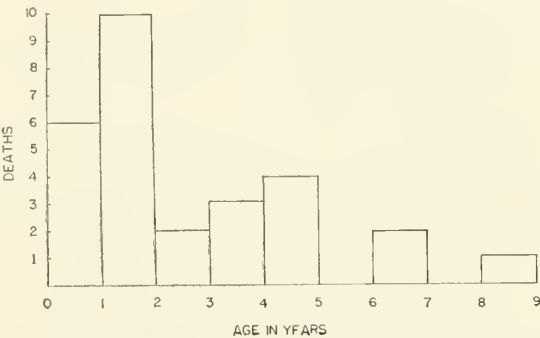


Fig. 4—Mortality Rate Per Year of Age.

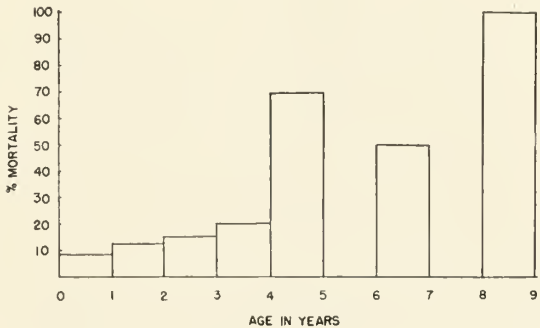


Fig. 5—Percent Mortality of Various Age Groups.

At autopsy the most prominent complications noted were atelectasis, pneumonia and dilatation of the heart. The latter was undoubtedly due to the marked respiratory and circulatory embarrassment which these patients have to undergo and which probably could have been circumvented if tracheotomies were done early. The following table will list the main complications seen at autopsy:

Pneumonia	12
Atelectasis	10
Dilatation of Heart	5
Myocarditis	4
Pneumothorax	2
Mediastinal Emphysema	1
Incision of Oesophagus	1
Toxic Nephrosis	1
Acute Proliferative Glomerulonephritis	1

Table 4. Complications noted at autopsy.

Treatment: The treatment of laryngo-tracheo-bronchitis has not changed much during the last 20 years except for the addition of new drugs. Jackson⁸ feels that the most important single therapeutic measure, except in those patients who need tracheotomy, is the immediate placement of the patient in a room in which the atmosphere is saturated with moisture from a mechanical humidifier. This is a far advance over the steam tent which is unfortunately used here. Oxygen alone is a drying agent and is not indicated. The oxygen tent using controlled humidity as described by Davison¹⁷ is excellent.

Sedatives in any form are contraindicated by most authors. However, while at the Willard Parker Hospital the author observed the use of whiskey, for the patient, in doses of 1 dram per year of age up to 4 drams with beneficial effects in allaying nervousness and restlessness in these patients. No evidence of respiratory depression was noted. Liquefying agents appear to have no effect on the sticky exudate seen in most cases. Constant surveillance by trained personnel and the proper use of suction can be very helpful at times.

Antibiotics and chemotherapy play an important part in our armamentarium. Since it is difficult to determine what organism one is dealing with until at least 24 to 48 hours, most authors agree that a "shot-gun" form of therapy may be indicated. Sulfa and penicillin have proved to be very effective agents. If 1. influenza is suspected, streptomycin and rabbit antiserum may be indicated. It has not been proven as yet as to what role the newer drugs will play in this disease. However, we recently had an experience with aureomycin which proved to be very encouraging. A one year old male infant had been treated with penicillin, sulfa, streptomycin, tracheotomy, and supportive therapy for 96 hours and appeared to be sinking fast. He had several periods of cyanosis and had to be bronchoscoped twice. On the fifth hospital day, all medication was stopped, and as a last resort he was placed on aureomycin 20 mg. intramuscularly every two hours. At the end of 30 hours his temperature had fallen to normal and he showed remarkable improvement. Aureomycin was continued for ten days and the infant made an uneventful recovery. Since the throat culture contained non-hemolytic streptococcus and the blood count was only 12500 white blood cells, this may well have been due to virus etiology and the response to aureomycin might be accounted for in this way. We eagerly await the experiences of others in the use of this drug in this disease.

General supportive therapy is also of great importance. The use of fluids and plenty of rest are of great value. The treatments and medications should be so arranged so as to disturb the patient as infrequently as possible. Intravenous fluids should be used with great caution unless one overburdens an already overloaded circulatory system. Concentrated serum albumin has been tried by many to reduce edema of

the larynx and was not shown to be of much value here.

Tracheotomy is one of the most potent weapons one has in the fight against this disease. The pediatrician must work hand in hand with the laryngologist so that this procedure might be done at a time that would be most beneficial for the patient. Neffson⁹ states that the indications for operative intervention are signs of extreme obstruction and exhaustion.

Table 5 lists the important features to be considered.

Signs of extreme obstruction:

- A. Restlessness
- B. Cyanosis or marked pallor
- C. Deep retractions
- D. Absence of breath sounds
- E. Anxious facies

Signs of exhaustion:

- A. Tachycardia
- B. Tachypnea
- C. Hyperpyrexia
- D. Stupor, coma, and convulsions

Table 5. Indications for Tracheotomy (Neffson).

However, one would not wait for all of these findings because the tracheotomy would be too late in most cases. It sometimes takes the "wisdom of a Solomon" to make this fateful decision. On too many unfortunate occasions, this is delayed too long. Suffice it to say that very close observation and cooperation by the pediatrician and laryngologist are most essential for the proper care of these cases.

It is beyond the scope of this paper to discuss the technique of tracheotomies. However, we would like to mention briefly one phase of this procedure. Mac Crady³ states that tension pneumothorax and mediastinal emphysema were more prone to occur if bronchoscopy is done prior to tracheotomy. However, most authors^{8,9,10,11,12} feel that the use of the bronchoscope prior to tracheotomy would tend to decrease the possibility of pneumothorax and should be done in all cases if possible. We concur with that opinion for the following reasons:

1. The bronchoscope furnishes an airway and relieves necessity for the so-called "emergency" tracheotomy.
2. It relieves the increased intrapulmonic pressure which according to Neffson¹⁹ causes pneumothorax by distending and finally rupturing the pulmonary alveoli.
3. Makes it easier to find landmarks.
4. Allows for clearing of the airway before tracheotomy is done.
5. Simplifies the tracheotomy and lessens the danger of injury to adjacent structures.

During this five year period 29 tracheotomies were done here. Of this total 16 patients lived and 13 died.

This would give an apparent mortality of 44%. However, 7 of these were terminal which would give a corrected mortality of 20.7%.

Table 6 compares these figures with others in the literature—modified from Orton.¹⁶

Author	Cases	Tracheot- omies	Deaths	Mortalities
Baum	24	17	9	53 %
Smith	43	12	4	33 %
Gittens	32	20	12	60 %
Richards	28	23	12	53 %
Brennerman	45	24	10	40.7%
Orton	62	20	7	35 %
Davison	17	9	1	11.1%
Howard ¹⁰	44	16	4	25 %
Davison ¹⁹	52	15	0	0 %
Children's Hosp.	202	29	13	44 %
Children's Hosp. (corrected)	202	29	6	20.7%

Table 6. Mortality rate from tracheotomies. (From Orton)

The duration of cannalization was from 4 to 22 days with the average of 10 days.

Complications that might be attributed to the tracheotomy directly were few in number. In the 16 cases that survived, mediastinal emphysema and pneumothorax were seen in one patient. In the 13 that died mediastinal emphysema and pneumothorax were seen in one patient, pneumothorax in one patient, and one patient had an incision of the oesophagus. The latter finding had no effect on the course of the disease in this patient, and the tracheotomy was done without the aid of an airway.

After an airway has been established by a tracheotomy, the most important task lies ahead—the proper care of the tracheotomized patient. It is most distressing to have a nurse assigned to the care of these patients, and when questioned, she will profess ignorance as to how she could take care of her patient. This situation has arisen on several occasions during the past year. This part of their curriculum cannot be stressed too strongly. In general, most authorities agree that constant capable nursing care is essential and may be life saving. The inner cannula should be removed and cleaned, and a small catheter should be used as often as necessary to aspirate the tracheo-bronchial tree. In many cases the use of a few drops of saline in the tube to soften the secretions would be helpful. Some authors recommend: 1:10,000 adrenalin,¹³ weak solution of sodium bicarbonate,¹⁴ or 1% ephedrine in normal saline¹⁵ to accomplish this end. If obstruction persists it may be necessary for bronchoscopy to remove the crusts. The use of cold steam would also be helpful; oxygen alone is considered too much of a drying agent.

No discussion of therapy would be complete without a few words on the treatment of acute epiglottitis. Nine cases of this disease were seen here, and seven

died within 7 hours after admission. One cannot stress too strongly the fact that these patients die from asphyxia very rapidly. If the diagnosis is made, an immediate tracheotomy is indicated. Watchful waiting with supportive and chemotherapy alone is contraindicated.

In order to alert and organize the personnel at this institution into an efficient team for the immediate care of these patients, an S.O.P. was drawn up early in 1948. It might be of some interest and value to reproduce it here.

1. The charge nurse, the resident and Asst. chief on the floor of which the patient is assigned will be notified immediately when the patient arrives on the floor.
2. The resident should see the patient immediately upon its arrival on the floor.
3. The following diagnostic and therapeutic procedures should be instituted immediately:
 - a) direct visualization of the pharynx, larynx and epiglottis
 - b) bacteriological smears and culture of the pharynx and epiglottis
 - c) blood culture
 - d) note the degree of cyanosis and record
 - e) note degree of restlessness and record
 - f) use of steam tent until cold steam is available
 - g) immediate and adequate use of antibiotics and sulfadizine
 - h) no sedation is to be used
4. Call E.N.T. consultant and inform him of status of patient.
5. Recommend immediate tracheotomy in any case of acute epiglottitis.
6. In presence of heart failure as evidenced by liver enlargement digitalization is indicated and a cardiologist should be consulted.
7. Excessive fluid should be avoided.
8. Excessive disturbance of the patient should be avoided. Administration of medications, parenteral fluids, examinations, etc. should be so planned as to cause a minimal disturbance to the patient.

Summary: A statistical study of 202 cases of acute laryngo-tracheo-bronchitis seen at Children's Hospital from Jan. 1944 to Jan. 1949 is presented with a brief review of the literature. *H.streptococcus*, *H.staph.aureus*, *C.diphtheria*, and *H.influenza* were the most common organisms found here. A discussion of the mortality rate and autopsy findings was given. Pneumonia, atelectasis, and dilatation of the heart were the three most common complications noted. The treatment is discussed with special emphasis being placed on early tracheotomy, use of antibiotics, and proper post-operative care. The use of aureomycin is mentioned. Immediate tracheotomy in all cases of acute epiglottitis is recommended. An S.O.P. for the handling of these cases is presented.

The author is indebted to Dr. John E. Cassidy and Dr. Allen Walker for their helpful advice in the preparation of this paper and to Dr. D. Joseph Judge and the pathology department for the pathologic section of the report.

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An Unusual Cause of Tinnitus

A CASE REPORT

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A 53 year old white female was first seen on May 31, 1950 complaining of a roaring behind her left ear, and a thumping in the left occipital region for 7 to 8 months. She stated that the noise was worse at night and interfered with her sleep. She has been very nervous since the onset of the above symptoms, and finds that on any exertion there is an increase in the thumping and roaring. These symptoms have caused her considerable worry and have caused her to reduce her activities markedly. There is no pain or vertigo associated. There is no history of trauma. One of us (R.W.L.) on complete general examination noted that pressure over a certain place in the left occipital region caused cessation of the thumping and the noise. This roaring sound could be heard by placing the stethoscope over the involved region. Thereby, the patient's statement as to its presence and also as to its cessation on pressure over the point in the occipital region could be verified.

The patient was a white female, well developed, obese, 53 years old, in no acute distress but apparently worried. Blood pressure 162/80. General physical examination was essentially negative. A thrill and palpable pulse could be felt posterior to the left ear, synchronous with her pulse. The sound, of which the patient complained, could be heard with the stethoscope and it could be stopped by pressure over the point in the left occipital region. X-ray's of the skull revealed a rounded defect in the bone in the left occipital region. The diagnosis was made of an arteriovenous aneurysm between the occipital artery and the transverse sinus within the skull.

Under pentothol anesthesia the posterior aspect of the head and neck were prepared in the usual manner. The skin incision extended from behind the left



ear to the external occipital protuberance. The occipital artery and greater occipital nerves were identified. The artery was followed upward but the branch followed did not go to the aneurysm. The skin incision was extended from behind the left ear to the neck along the sternomastoid muscle. Here the main trunk of the enlarged occipital artery was identified and followed upwards. The artery passed inwards through the defect which was noted in the x-ray of the skull. The artery lay at the superior aspect of the bony defect and was about one fifth the size of the bony defect. Evidently the pulsations of the artery were eroding the bone at its superior aspect accounting for the large hole in the bone, several times greater than necessary for admission of the vessel.



It was intended to perform an angiogram to demonstrate the arteriovenous communication between the occipital artery and the transverse sinus. The artery became very tortuous near its entrance into the skull so that when a needle was introduced into the vessel

the side of the vessel was perforated. Henceforth diastase could not be introduced sufficiently fast to get a satisfactory x-ray picture. In retrospect when one is absolutely certain that the correct vessel is at hand, all branches should be ligated distal to the point where a cannula is placed into the artery and fixed in situ. It is believed that by this method a satisfactory angiogram may be secured.

The occipital artery was ligated securely at its entrance into the skull at the bony defect. The defect was carefully examined. There was no evidence of any metastatic tissue being present. The defect, except where the artery perforated, was filled with fibrous tissue.

The patient was completely relieved of all noise in her head and it is believed that the relief will be permanent. Since relief of the tinnitus, the patient's nervousness has been markedly alleviated. This case was a relatively easy one to handle but it emphasizes the importance of checking all noises, tinnitus and etc., in the head against the pulse rate. A history of increase in noise on exertion and finding that the noise is synchronous with the pulse beat is diagnostic of a vascular origin of the abnormal sound.

Use of Methyl Testosterone in Premature Infants

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Claims for the beneficial effect of methyl testosterone in premature infants have been made and disputed. Shelton and Varden¹ found better survival, shortened hospital stay, minimized initial weight loss and increased rate of gain following administration of the drug. All infants in their group were fed routinely by gavage. Tittle² reached the same conclusion as to the value of the treatment and compared results in 18 cases with results in another group of prematures, but did not pair the controls with infants of similar weights. Hardy and Wilkins,³ comparing alternate prematures and pairing the cases by weight, found no benefit from the use of methyl testosterone. Seitchik and Agerty,⁴ could not demonstrate in a group of prematures the significant nitrogen retention which was thought to be the beneficial result from the use of the drug. No observer has noted any harmful effect.

This additional report is made on 20 premature Negro infants who were treated under identical conditions at Roper Hospital and were given 5 mg. of

methyl testosterone orally and daily in a single dose. The drug was started as soon as milk feeding was established. Twenty prematures of nearly parallel weights were used as controls. None of these infants had any significant infections. None was fed by gavage except very occasionally. Facilities for care were not entirely satisfactory but were equivalent in the series.

As a basis of comparison, the grid for prematures as prepared by Dancis, O'Donnell, and Holt⁵ was used, and the variation above or below the expected curve of gain was noted, as follows below. Weight in grams was recorded in round numbers by the closest unit of 5 grams.

Of the twenty Negro premature infants given methyl testosterone, 14 made significantly better gains in weight than did infants of approximately the same weight over the same length of time. Five of the controls gained better than did the five infants of equal weight who took the drug. In one pair there was no difference. No effect of the treatment was noted other than the gains in weight.

From the Department of Pediatrics, Medical College of the State of South Carolina.

The drug (oreton-M) was furnished through the courtesy of Schering Corporation.

Negro Premature Infants paired by approximate weight

Birth weight (Grams)	Methyl Testosterone	Variation from graph (Grams)	Age (days)
1956	+	+200	15
2098	0	— 25	15
1701	+	0	31
1673	0	— 50	31
1729	+	+400	23
1843	0	+ 50	23
2041	+	+225	21
1871	0	+ 50	21
1715	+	+300	22
1843	0	+150	22
2041	+	+ 50	16
2155	0	— 50	16
2027	+	+175	16
1956	0	+ 50	16
1219	+	+250	48
1247	0	—350	48
1928	+	+350	9
1928	0	— 75	9
1389	+	+300	40
1474	0	+250	40
1673	+	+125	31
1616	0	+ 75	31
2084	+	+ 75	11
2155	0	—150	11
1304	+	—100	28
1375	0	—150	28
1361	+	—100	50
1276	0	—150	50
2000	+	+125	15
2098	0	+150	15
1758	+	0	25
1843	+	+ 75	25
1829	+	—125	33
1885	0	— 50	33
1701	+	+125	24
1701	0	+475	24
2183	+	0	12
2225	0	+ 25	12
2027	+	— 50	23
1928	0	— 50	23

Summary

In a small group of Negro premature infants, methyl testosterone by mouth appeared to exert a beneficial effect in producing an acceleration in gain in weight in 14 out of 20 instances.

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Plan to Attend

Annual Meeting

S. C. Medical Association

Myrtle Beach

May 15, 16, 17

Surgery of the Newborn

N. D. ELLIS, M.D.
Florence, S. C.

Diagnosis of surgical conditions of a newborn and their treatment present problems significantly different from those in older children and adults. Proper pre- and post-operative management is of great importance in lowering the mortality.

Of all operable congenital deformities seen in the newborn infant, none is more difficult to handle than atresia of the esophagus with tracheo-esophageal fistula, which is an embryological defect with a communication between the trachea and esophagus. The infant with this condition is usually underweight and not infrequently premature. The operative repair is long and tedious and the post-operative course is stormy. Thus, it is no wonder that the mortality continues to be appalling.

A diagnosis of tracheo-esophageal fistula could so easily be made at the time of delivery if the possibility of such a deformity was considered in all newborn children who breathe poorly immediately after birth, have froth oozing from the mouth, and have cyanotic spells during the early hours after delivery. Unsuccessful attempts to introduce a catheter into the stomach of such a child at once should arouse suspicion of congenital obstruction and the baby should be studied further immediately. Confirmation of the deformity is promptly established by introduction of a few centimeters of Lipiodol through a catheter into the blind pouch of the esophagus and taking an x-ray. Visualization of the blind upper end of the esophagus and the presence of air in the stomach or intestines make the diagnosis of atresia of the esophagus with esophageal fistula. However, if air is not seen in the gastrointestinal tract, a diagnosis can be made of atresia of the esophagus without tracheo-esophageal fistula.

Operation on this type of case is long and tedious. The fistula is closed and an end to end telescoping technique of anastomosis is usually employed. The mortality rate runs around 50% in this type of case.

The second condition is intestinal atresia. Signs are manifested in the first days of life. Bile stained vomitus, which becomes progressively more frequent, is the first symptom. Also associated is abdominal distention, fever and absence of cornified epithelial cells in the stools during the first forty-eight hours. Primary anastomosis is the procedure of choice. The whole intestinal tract should be examined in that multiple atresias are frequently found.

The most common rectal anomaly is an imperforate anus with a rectal pouch ending blindly some distance above. Fistulas are frequently seen. Absence of an anal opening, failure to pass stools or meconium, or its passage through an abnormal outlet are the usual

early findings. Abdominal distention, vomiting, and later intestinal pattering are noted. The surgical treatment depends on the anatomic relationship of the rectum to the anal site.

Malrotation of the intestine usually causes external pressure on the second or third part of the duodenum and may become symptomatic during the first three or four weeks of life. It may simulate intestinal atresia during the first week due to the external pressure on the duodenum. Persistent vomiting, usually bile stained, abdominal distention, dehydration, gas-filled stomach and duodenum which are seen on x-ray, confirm the diagnosis. It is well to remember that volvulus may accompany this condition, as the small intestine is attached to the posterior abdominal wall by a very short mesentery.

Congenital diaphragmatic hernia must be considered with the symptoms of dyspnea, vomiting, cyanosis, which may occur only with feeding or crying, and may be relieved by turning the infant. Increased pulse and respiratory rates, decreased respiratory excursion, decreased or absent breath sounds with bowel sounds on the affected side may be noted. X-ray and fluoroscopic study permit identification of the herniated structures. Immediate surgery is indicated in these conditions. Esophageal hiatus hernia should be treated surgically if there is evidence of gastric or intestinal obstruction at the hernial ring or if severe bleeding occurs from a mucosal ulceration.

Omphalocele or herniation of the abdominal contents covered only by peritoneum and amniotic membrane, can be diagnosed by inspection at birth and should be treated immediately with excision of the sac and replacement of the viscera into the abdominal cavity. There should be no delay in operating on these cases because after the thin, parchment-like membrane ruptures, a fatal peritonitis is usually the outcome. (We have had one case recently with recovery.)

Intussusception must always be thought of in a child with the symptom of pain and vomiting. The most common type is the ileo-colic. Bloody stools occur in approximately 85% of the cases after twelve to twenty-four hours of onset. A mass can be felt in the abdomen in the majority of the cases. Surgery, but no more than is absolutely necessary, is the treatment of choice. The operation should consist of reduction of the intussusception and nothing more. The mortality rate climbs rapidly with the passage of time in these cases.

Meckel's Diverticulum represents that portion of

the vitelline duct which opens into the ileum. There are several important pathological conditions which may arise from a Meckel's Diverticulum. Listed in the order of frequency are first, hemorrhage; second, the leading point of an intussusception; third, inflammation with or without perforation; fourth, umbilical fistula; and lastly, volvulus with infarction of the diverticulum. Treatment is surgery with removal of the Diverticulum and correction of any previously mentioned complication which may be present.

Duplication of the alimentary tract may cause symptoms and signs of abdominal obstruction, hemorrhage and abdominal masses on palpation. Surgical resection and side to side anastomosis should be performed.

Pyloric stenosis, characterized by a projectile vomiting containing no bile, usually begins during the second or third week of life. In addition, there is failure to gain weight, hunger, infrequent small stools, gastric peristaltic waves passing from left to right in the epigastric region, and a palpable pyloric tumor in the right upper quadrant in the majority of cases. It is more common in males and is treated by the Ramstedt type of operation. In the last eighteen months, we have operated on eight cases of pyloric stenosis with an excellent result in each baby.

Another condition which has been mentioned in the literature more frequently lately is congenital

megacolon or Hirschsprung's disease. The etiology of this condition is thought to be neurological imbalance due to congenital absence of Auerbach's plexus in the intestine. Recent reports have shown that if the involved segment of bowel is resected back to the point where Auerbach's plexus appears in the intestine, an excellent result can be obtained in those cases coming to surgery.

Persistent jaundice first noted at birth or soon afterwards accompanied by splenomegaly, hepatomegaly, clay-colored stools, dark urine, and normal prothrombin time, usually characterize congenital biliary atresia. Physiological jaundice of the newborn, erythroblastosis, congenital syphilis and infectious hepatitis must be considered in the diagnosis. Exploratory laparotomy should be performed in all cases in which the diagnosis of congenital biliary atresia is entertained. Fifteen to twenty percent of cases are amenable to correction by surgery.

Inguinal and umbilical hernias only rarely come to surgery at this age unless they become incarcerated and cannot be reduced.

I hope I have brought to your attention some of those conditions occurring in the newborn infant which may be corrected by surgery. The interval from birth to diagnosis and treatment must be short if more of these babies are to be salvaged.

CANCER

Edited by R. W. POSTLETHWAIT, M.D., Charleston, S. C.

CANCER OF THE LARYNX

R. W. HANCKEL, JR., M. D.

Cancer in general is of particular interest to us at present for the following reasons:—

1. Cancer, as a cause of death, has risen from 8th to 2nd place in the last twenty-five years. One reason for this is the lengthened life span.

2. The public has been made cancer conscious by the extensive advertising campaign which is now in progress.

3. Cancer of the larynx, which is the major concern of this paper, is of interest because, in the majority of cases, hoarseness, an easily detectible sign, makes its appearance early and is constantly present until the condition is remedied.

It will be recalled that cancer of the larynx is divided into two main groups: one, *intrinsic* carcinoma which involves the true cords alone and particularly the free borders of the cords; and *ex-*

trinsic carcinoma which involves the other laryngeal structures either primarily, or secondarily from neighboring areas.

The lymphatic supply of the true cords is a closed system and therefore metastases from malignancies occurring on the cords themselves develop late. On the other hand, the lymphatic supply of the other portions of the larynx intercommunicate freely and so metastases occur early.

Thus we have intrinsic (true cord) cancer which metastasizes late, but is detectible early because hoarseness is the first sign and is constantly present; and extrinsic cancer (involves other laryngeal structures) which metastasizes early and is not usually detected until late, because hoarseness is not an early sign.

Fortunately eighty-five per cent (85%) of laryngeal carcinoma is intrinsic and therefore should be detected early enough so that surgery will be of benefit. Extrinsic carcinoma constitutes only fifteen per cent (15%) of these cases.

Unfortunately, hoarseness is a sign which is present in almost every organic lesion of the larynx. The general practitioner, who is usually our first line of de-

From the Department of Surgery and the Cancer Clinic, the Medical College of the State of South Carolina, Charleston, South Carolina.

fense in these cases, *frequently* sees patients whose major sign, hoarseness, clears up either spontaneously or with some minor help from the physician and so he comes to regard hoarseness lightly. If the general practitioner can be alerted in these cases and made aware that hoarseness that persists longer than a period of three weeks particularly in a male over 40 years of age should be adequately investigated, then much will be accomplished in bringing these cases to light early. Early detection and adequate therapy makes for a higher percentage of ten year cures.

Four to five per cent of all carcinoma of the body involves the larynx. Ninety-seven per cent of cancer of the larynx is found in males over forty-five years of age, and only three per cent in females.

The cause of carcinoma of the larynx is shrouded in as much mystery as is carcinoma elsewhere in the body. Chronic irritation which is frequently blamed as a causative factor in cancer elsewhere in the body cannot be indicted as a cause here. Tobacco and voice strain, the two most frequent causes of chronic laryngeal irritation, have been investigated by Martin at Memorial Hospital in New York. He found that the per cent of heavy smokers who had cancer of the larynx about equalled the number of heavy smokers who had no cancer of the larynx. He also found that of the numerous patients referred for voice strain (singers, teachers, hucksters, auctioneers, etc.) and who had frequent follow-up examinations for many years, only two developed carcinoma of the larynx.

Epidermoid or squamous carcinoma comprises about ninety-seven per cent of cancer of the larynx. Adenocarcinoma makes up only two per cent and lymphosarcomas and anaplastic carcinoma, the remaining one per cent.

As noted above, hoarseness is *the* constant symptom in all cases of intrinsic cancer. This hoarseness may begin as a slight huskiness and this may be relieved, at least partially, upon the administration of penicillin. This may lull one into a sense of false security. The hoarseness will progress to a complete aphonia. If a fungating type of lesion is present, the hoarseness may be accompanied by a gradually increasing dyspnea.

In extrinsic cancer of the larynx the first symptom usually found is pain. This may be present only on swallowing, or it may be constant, or it may be referred to the ear on the side involved, or any combination of these three may be present. Hoarseness is present in about one-third of the cases. The appearance of an enlarged lymph node is not infrequently found as the presenting symptom. The symptoms of the extrinsic variety, as indicated above, vary depending on the part of the larynx which is involved.

Once the suspicion is aroused that cancer of the larynx is present, every effort should be directed toward obtaining a complete view of the larynx. This may be accomplished in the majority of cases by the

indirect method using a laryngeal mirror. The patient is seated opposite the examiner with the light about opposite the patient's *left ear*. The examiner sits facing the patient with a head mirror over his *right eye* and with the mirror so arranged that the pupil of the right eye is opposite the central opening in the head mirror so that binocular vision is obtained. The examiner then grasps a laryngeal mirror (size #4 or 5) in the right hand, pencil-fashion, about at the junction of the handle and the shaft of the mirror and warms it by dipping it in a bowl of hot water (wipe dry afterward), or by heating over an alcohol lamp or an electric light bulb. Be sure that the mirror is not so hot that it is uncomfortable to touch. The tip of the patient's tongue is then held between the thumb and forefinger of the examiner's left hand, the thumb being on top. The mirror is then introduced into the mouth over the dorsum of the tongue so that the back of the mirror presses the uvula up and back. The beam of light from the electric light is reflected by the examiner's head mirror on to the laryngeal mirror and is directed to the various parts of the larynx and hypopharynx by altering the angle of the laryngeal mirror. Usually it is necessary to look at the larynx several times before a composite picture is obtained. Some patients relax readily and a full view of the larynx can be obtained rather easily. Others require a spray of 2% pontocain to diminish the gag reflex. If the patient is asked to open his eyes and look at some fixed point such as the hole in the head mirror, relaxation is sometimes increased. During the examination have the patient first breathe easily, then say E-e-e-e not moving the tongue when this is done. This will cause the epiglottis to move forward and the anterior commissure can then be visualized. Also have the patient cough and laugh several times during the procedure, as this will aid in the complete visualization of the anterior commissure which is the frequent site of cancer of the larynx.

If a tumor is visualized a specimen may be obtained in the office. One uses mirror visualization except that the patient holds his own tongue with gauze held between the thumb and forefinger of the right hand. The examiner holds the mirror in his *left hand* and the biting forceps (mounted on a curved cannula and attached to a universal handle) in his right. A preliminary spray of 2% pontocain on the larynx until the cough reflex is abolished is usually necessary. This office procedure eliminates the expense of hospitalization for a direct examination and biopsy of the tumor. In all mirror examinations remember that the right side of the larynx is seen on the left side of the mirror and vice versa.

If it is impossible to get a complete view of the larynx with a mirror or if a biopsy cannot be obtained by the indirect method, the patient should be hospitalized and a direct laryngoscopy done.

The patient is instructed not to eat for several hours before the operation. He is given sodium amytal

gr. iiiss and atropine sulphate gr. 1/150 about forty-five minutes before operation. Some other pre-operative medication may be used but the author advises against the use of morphine if pontocain is to be used as the topical anesthetic. This combination has been known to produce fatal results.

The patient is advised to cooperate as much as possible by relaxing and breathing quietly. The larynx is anesthetized by introducing pontocain 2% (or cocaine 10%, if preferred) directly on the larynx until the cough and gag reflexes are abolished. Under sterile precautions, with the patient recumbent, the laryngoscope is introduced into the mouth, the epiglottis is exposed and lifted anteriorly with the tip of the laryngoscope. This brings the larynx into direct view. If a tumor is present a biopsy is taken using laryngeal cup forceps.

If a biopsy positive for carcinoma is obtained by either the indirect or direct procedure, no time should be lost in instituting the proper surgical procedure.

If only one cord is involved and the cord remains motile indicating that the arytenoid is not as yet involved, then a laryngo-fissure is the procedure of choice. This consists of a midline neck incision from the hyoid bone to the supra-sternal notch, splitting the thyroid cartilage in the midline, and doing a submucous resection of the involved cord. This is done under a local anesthetic.

If both cords are involved, a complete laryngectomy should be done. If only one cord is involved but is partially or completely fixed indicating extension into the arytenoid articulation, a complete laryngectomy also should be done. If in addition, one finds cervical node enlargement, then besides a complete laryngectomy, one should also do a block neck dissection on one or both sides. This may be followed by x-ray therapy.

The complete laryngectomy is also done under local anesthesia. A midline incision is used, the larynx is freed of its muscular attachments, the pharynx is opened, the larynx is then dissected free posteriorly and is amputated from the trachea just below the cricoid. The wound is closed in layers, being very particular about the closure of the pharyngeal mucosa so as to prevent the formation of a fistula.

After the removal of the larynx the patient is encouraged to develop an esophageal voice. This is best accomplished by teaching these individuals in a group, the teacher being a laryngectomee who has

developed a good esophageal voice. Speech is produced in an individual with a normal larynx by the interruption of a column of air by the vocal cords in approximation. This produces vibrations in the column of air and this sound is molded into speech by the tongue, lips, etc. In a laryngectomee the column of air has been trapped in the esophagus and is liberated by belching. This column is interrupted by the approximation of the free borders of the crico-pharyngeus at the upper opening of the esophagus and this vibrating column of air is molded into speech by the lips and tongue as before. The only things that are different is that the source of the air is the esophagus instead of the lungs and the lips of the crico-pharyngeus muscles instead of the vocal cords set the column of air in vibration.

Before leaving this subject, it should be mentioned that Cunniff and the radiology department at Manhattan, Eye, Ear and Throat Hospital have developed a technique of x-ray therapy in treating both early and late cancers of the larynx and they report a percentage of cures comparable to that obtained by surgery.

In general, it may be stated that the earlier the case is discovered and the more radical the treatment instituted, the less the chance for a recurrence. In other words, it has been found that many cases of laryngo-fissure require subsequent complete laryngectomy which makes for a poorer prognosis. If there is any doubt in the surgeon's mind, he is treading on safer ground if he performs a complete laryngectomy.

Summary:—Carcinoma of the larynx is discussed. It is emphasized that hoarseness is the predominant sign in cancer involving the true cords and the general practitioner should be on guard to investigate to its fullest all cases of hoarseness of more than three weeks in duration, especially those in males over 40 years of age. Methods of obtaining biopsies are described and the various types of treatment are mentioned.

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**TEN POINT PROGRAM
OF THE
SOUTH CAROLINA MEDICAL ASSOCIATION**

1. Cooperation

To promote closer cooperation and better understanding between all agencies, groups and individuals concerned with providing and improving medical care for the people of South Carolina.

2. Extension of Medical Care

To study constantly the need and availability of medical care in each county of the State and in the State at large.

To promote plans for providing or improving medical care where is a need, particularly in the rural areas.

3. Pre-Paid Hospital and Medical Care

To make voluntary pre-paid hospital and sickness insurance available to all the people of the State (through Blue Cross, Blue Shield, and commercial insurance policies), and to promote the widespread purchase of such insurance.

4. Care of Indigent

To work with local county and state agencies, and with philanthropic organizations, toward securing good medical care for the indigent.

5. Public Health

To support the South Carolina State Board of Health in its broad program of preventing diseases and of safeguarding the health of our people.

6. Health Councils

To support the State Health Council in its announced program. To sponsor

the formation of a County Health Council in every county of the state, and to encourage our members to support and to work with these organizations.

7. Hospitals

To promote the expansion of present hospital facilities and the building of new hospitals—where there is a definite need.

To strive for highest standards of professional care in the hospitals in the State.

8. Medical Colleges

To support the Medical College of the State of South Carolina and to bend our efforts toward keeping its standards of education on a par with other medical colleges throughout the country.

To promote good nursing education and good nursing care throughout the State.

9. Education of the Public

To acquaint the citizens of the State with regard to the problems of medical care in existence today, to inform them as to what is being done to solve these problems, and to advise with them as to further plans for securing better health and better medical care for the people of South Carolina.

10. Political Medicine

To prevent political control or domination of medical practice or of medical education.

The Journal of the South Carolina Medical Association

EDITOR: Julian P. Price

Florence, S. C.

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MARCH, 1951

THE BOLTON BILL

Congresswoman Bolton has introduced a bill in Congress which would provide federal aid to nursing education. Under the terms of the bill, nurses training schools would be given so much per student with an additional amount for increased enrollment. Provision is also made for funds to be used in expanding the facilities and curricula of the schools. The program would be administered by the Surgeon General of the Public Health Service, with the advice of an Advisory Council composed of thirteen members, eight of whom would be nurses. The Advisory Council would be appointed by the Federal Security Administrator. To obtain funds under this proposed program, each school would have to be approved by the Surgeon General.

Since this bill has been endorsed by leading nurses organizations, and since nursing is the closest profession to medicine, we would do well to study the bill and its implications most carefully.

The prime reason given for this proposed program is that there is a definite dearth of nurses and that our schools of nursing are financially unable to meet the need.

With the argument that there is a need for more nurses, particularly in our present increased military program, we will not contend. But we are not certain that this shortage is due primarily to financial distress on the part of training schools, and we have been unable to find any competent study to prove the point. We feel strongly that all private resources should be exhausted before federal aid should be extended to educational institutions of any type, and that the aid should be given in such a way that no strings shall be tied to the school which would in any way dominate or restrict its administration or activities.

The portion of the bill, however which concerns us most is that which gives to the Surgeon General the authority to approve or disapprove a school in terms of financial aid from the federal treasury. It is true that the bill provides for an Advisory Council composed largely of nurses, but the Surgeon General

is under no obligation to follow the advice of the Advisory Council, and further the members of the Advisory Council are appointed by the Social Security Administrator—who at the present time is Mr. Oscar Ewing.

Training schools for nurses are now accredited on a state level by state board of nurses examiners. Leaders in the nursing profession are anxious to have a national accrediting agency such as prevails for medical schools. But the accrediting of medical schools is done by a non-political body with physicians having a voice in determining the membership of that body. The body is composed solely of individuals who are thoroughly acquainted with the problems of medical education and its sole concern is that of standards of medical education. It is absolutely incapable of wielding either political or financial pressure on schools to force them to follow a given course.

If leaders of nursing desire accrediting of training schools on a national level they would do well to follow the example of physicians in establishing their own agency. To endorse a federal bureau as the accrediting agency to accomplish their end, is to sell their birthright for a mess of pottage.

The problems which nurses are facing have been of keen concern to us over a period of years and we have endeavored to work with nurses in attempting to solve these problems. We congratulate them upon the advances which have been made. But as they face the immediate future with its uncertainties, we beg of them that they think not of the months ahead but of the years to come. Enactment of the Bolton Bill would seem to accomplish for the nurses that which their own efforts have been unable to obtain, but it might well result in the loss of freedom which is so dear to the heart of professional men and women. The thought of having the training schools for nurses in this country under the domination of a political bureau in Washington is abhorrent to us, and it is our considered opinion that the rank and file of both graduate and student nurses are in agreement with us. And we also believe that leaders in the nursing profession, once they realize what the enactment of

the Bolton Bill could mean to their training schools and to their colleagues, will withdraw their support. We hope that this realization will not come too late.

THE SCRIBE

It is with genuine pleasure that we salute the newest member of the medical publication family in this state, The Scribe. Published by the Medical Society of South Carolina (the Charleston County Medical Society), it promises to be a real addition to the medical activities of the state.

Dr. J. I. Waring, Editor, and Dr. J. A. Seigling, Business Manager, are to be congratulated upon the appearance and content of the first issues. It is both interesting and informative, and bears careful reading. We will look forward to further issues with keen anticipation.

AMERICAN MEDICAL EDUCATION FOUNDATION

Since the end of World War II, rising costs, inflation, decreased income from endowments and fewer large benefactions have created major financial problems for the medical schools. The schools have found it difficult to purchase new and replace old equipment . . . to provide salaries adequate to attract and hold competent teachers . . . to maintain libraries . . . and to modernize or expand their physical facilities.

The American Medical Association believes that the possibilities of securing adequate support from private sources are far from exhausted. It believes that once the need is made clear to the medical profession . . . and also to those outside the profession who value the contribution of our medical schools to society . . . adequate funds from voluntary sources on a continuing basis can be secured.

The medical profession has a primary responsibility of leadership in securing such funds. At its meeting in Cleveland in December 1950, the Board of Trustees of the American Medical Association with the unanimous and enthusiastic approval of the House of Delegates voted to appropriate one half million dollars as the nucleus of a fund for the unrestricted use of the medical schools during 1951. The Board of Trustees, in announcing this appropriation, expressed the conviction that the members of the profession would greatly supplement this appropriation by individual contributions.

Our medical schools stand in need of additional financial support if they are to continue to provide the American people with more and better physicians. The tremendous advances in raising our health

standards in the last fifty years have been due in large measure to the great improvements in medical education. Adequate financial support of our medical schools is, therefore, essential to the continued advancement of the nation's health.

The American Medical Education Foundation has been chartered as a not-for-profit corporation under the laws of the state of Illinois to receive annual contributions from physicians and friends of the medical profession. The Commissioner of Internal Revenue has been asked to rule that contributions to the fund will be deductible for the computation of income taxes.

Contributions received by the Foundation will be distributed to all approved medical schools in the United States. The funds will be given for unrestricted use—each school being entirely free to determine how best it can use its share to improve the basic training of its medical students.

It is recognized that the members of the medical profession alone cannot meet all the needs of the medical schools. Others must help. If the medical profession will lead the way, many others should be eager to make their contributions. By such a combined effort success can be achieved.

Each member of the medical profession recognizes a debt to the medical schools with which he has been associated as student, intern, resident and practitioner. Every member of the profession must also recognize that without strong medical schools the future capacity of the profession itself to serve society will be in jeopardy.

MINUTES OF CALLED MEETING OF HOUSE OF DELEGATES 1/28/51

The meeting was called to order at 3:15 p. m. at the Columbia Hotel by Dr. Tuten, President.

The Credentials Committee reported 42 delegates present.

The Secretary read the notice of the called meeting and its purpose. The floor was then extended to Dr. J. K. Webb, Chairman of the Committee on the Care for the Indigent, who explained, in detail, the report presented to Council at a recent meeting.

The report was then discussed and questions were asked regarding it, by the following doctors: Dr. Maguire of Charleston, Dr. Tom Brockman of Greenville, Dr. J. R. Young of Anderson, Dr. R. C. Smith of Conway, Dr. Joe Waring of Charleston, Dr. Jeff Chapman of Walterboro, Dr. Wallace of Spartanburg, Dr. Wallace of Chester, Dr. Lesesne Smith of Spartanburg, Dr. Joe Cain of Mullins, Dr. Thackston of Orangeburg, Dr. Wyatt of Greenville, Dr. Polk of Spartanburg, Dr. R. C. Smith of Conway, Dr. O. B. Mayer of Columbia, Dr. Evatt of Charleston, Dr. Price of Florence, Dr. Henson of Rock Hill, Dr. Bethea of Latta, Dr. D. O. Winter of Sumter, Dr. Hugh Smith of Greenville, Dr. Preacher of Allendale.

It was moved by Dr. Wyatt of Greenville, seconded

by Dr. Brockman, that the plan, as presented by this Committee, be adopted by the House of Delegates. The vote was 27 in favor, 18 opposed.

Dr. Julian Price then moved, seconded by Dr. Thackston, that the recommendation of the Committee be drafted in the form of a bill and presented to the Governor for passage by the Legislature. This was passed.

Another matter was brought up but unanimous consent of the convention could not be obtained, so it was dropped.

Adjournment at 4:45 p. m.

Respectfully submitted,

N. B. Heyward, M.D., Secretary

SOUTHERN PEDIATRIC SEMINAR

The annual Southern Pediatric Seminar will be held in Saluda, N. C. for two weeks, beginning 16th. Present indications point to a large registration and those who plan to go should communicate with Dr. D. L. Smith, Registrar, Spartanburg, S. C.

Last year for the first time the Pediatric Seminar was followed by a one week Obstetric Seminar and this will be given again this year.

GRADUATE SURGICAL ASSEMBLY

The Graduate Surgical Assembly of the South-eastern Surgical Congress will be held at Hollywood, Fla. (Hollywood Beach Hotel), April 11-14, 1951. Thirty-seven distinguished speakers from various parts of the country will appear on the program.

Those desiring information about the Assembly should communicate with Dr. B. T. Beasley, 701 Hurt Building, Atlanta 3, Ga.

BRODIE C. NALLE LECTURE

The second Brodie C. Nalle Lecture, sponsored by The Nalle Clinic Foundation, will be presented at the Hotel Charlotte on Friday, April 27, 1951, at 8:00 P. M. The speaker will be Dr. Samuel A. Cosgrove of Jersey City, New Jersey.

Dr. Cosgrove's subject for the Brodie C. Nalle Lecture will be "The Clinical Management of Toxemia of Pregnancy." As he has a reputation of being an excellent teacher and lecturer, this presentation should be of great value to those physicians concerned with pre-natal care. All interested physicians are cordially invited to attend.

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

STATE ASSOCIATION TO PROMOTE PLAN FOR INDIGENT CARE

The House of Delegates of the South Carolina Medical Association, in a special meeting on Sunday afternoon, January 28th, in Columbia, adopted by a vote of 27 to 18 the report of the Association's Committee on the Care of the Indigent. It thereby approved the plan proposed by the Committee and gave the Association's endorsement to the necessary legislation.

Dr. John K. Webb of Greenville, Chairman, and the other members of his Committee, Drs. J. B. Floyd, Winnsboro, E. C. Kinder, Columbia, George Smith, Florence, and W. O. Whetsell, Orangeburg, had made a careful and comprehensive study of the situation with respect to the hospital care of the indigent in South Carolina, and their report had been submitted to the Delegates in writing some ten days prior to the meeting. After full discussion, it was adopted by the House without change, and the Committee was directed to have the necessary bill drafted and arrange for its introduction in the General Assembly, with the understanding that it would have the benefit of the Association's endorsement in the effort to secure its passage.

The plan proposes to deal with the care of the medically indigent on a statewide basis. Following are some of the principal provisions:

The State will be asked for an appropriation of \$1,000,000 to be allocated among the counties on the basis of population. Counties which wish to participate in the program will match the funds allocated to them by the State, and the money is to be used to pay the cost of hospitalization and drugs for the medically indigent.

If all the counties participate and match the million dollars to be appropriated by the State, this would provide approximately \$1.00 per capita for the entire population, and that amount has been determined as the reasonable minimum necessary to take care of the medically indigent in South Carolina.

An Advisory Committee would be appointed, composed of 15 members, three of whom would be doctors recommended by the South Carolina Medical Association. In addition, the Committee would include two hospital representatives, one nurse, one pharmacist, and eight members-at-large.

Local advisory groups in the counties would be set up on generally the same basis, but of course would be much smaller.

Those who are medically indigent would be determined by the Department of Public Welfare after consultation with the statewide or central advisory committee. Hospitals would be paid a percentage of



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... is a powerful preventive of motion
sickness."*

—Editorial: Dramamine,
GP 2.27 (July) 1950



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For the dizziness, nausea or vomiting caused by motion, Dramamine has given unusually satisfactory results, prophylactically and therapeutically. Supplied in 50 mg. tablets and in liquid form. G. D. Searle & Co., Chicago 80, Illinois



RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

their per diem rate, the amount again to be determined by the Board of the Department of Public Welfare, after consultation with the central advisory committee.

A bill has been prepared and is expected to be presented to the Legislature in the near future. The plan was fully discussed by members of the House of Delegates. Those who favored it pointed to the urgent necessity of the adoption of some plan for the assistance of the poorer counties and it was the view of the majority that the plan proposed by the Association's Committee offered a very satisfactory solution. Thus, the State Association takes the initiative in another concrete effort toward the solution of a problem closely associated with the objectives of the medical profession. None of the funds to be appropriated if the bill is adopted, would be used to pay doctors. As in the past, their professional services would of course continue to be given free of charge to patients in these categories.

MANY MEMBERS PAY DUES

Response to the increased efforts on the part of the Treasurer and the Business Office to collect 1950 dues to both the State and the American Medical Associations has been most heartening. In the latter part of December letters were mailed to the secretaries of all county societies showing a list of their members who, up to that time, had not paid dues to the State Association or to the American Medical Association. The secretaries were asked to check these lists with their records and to inform the Business Office of any changes. Some of the secretaries responded and it was interesting to note that the officers of the larger societies were the most cooperative. Some changes were necessary because certain members had retired from active practice or had become entitled to Honorary status through continuous membership in good standing of the State organization for 40 years.

Following this letter and the response, reminders were mailed to all members who remained unpaid. Largely as a result of these efforts, the dues of 37 members of the State Association were received between the end of December and the 1st of March, and 72 members paid dues to the American Medical Association. This brings the total number of paid members in good standing of the State organization as of the latter date to 1,020. Of this number, a total of 970 have paid dues for 1950 to the American Medical Association. It will be necessary, therefore, for at least 31 more members to pay their dues to the A. M. A. if our two delegates are to be retained.

Dues for 1951 to both the State and National organizations became payable on January 1st. By March 1st, considerably more than \$6,000 had been received for the new year, and additional collections are coming in regularly. Members are requested to

bear in mind that payment of 1951 dues is a requisite to registration at the annual meeting. Payment in advance, in sufficient time for the county secretary to remit to the State office will facilitate the accounting and keeping of records there and decrease measurably the delay incident to registration at Myrtle Beach.

COOPERATIVE MEDICAL ADVERTISING BUREAU

The State Journal Advertising Bureau, formerly the Cooperative Medical Advertising Bureau, seems to be doing an excellent job in the securing and placing of advertising for state medical journals. According to the annual financial report for 1950, a total of 10,796 pages of advertising were placed through the Bureau, with a net return to the journal offices of \$533,545.71.

The actual sales costs amounted to about 6.4%. According to Mr. Alfred J. Jackson, this is a very low percentage, the cost of selling advertising space, generally, being from 15 to 30% without certain detail services rendered by the Bureau.

Of the 39 state medical journals now being published, the Bureau serves 34, representing 42 state medical societies. The Journal of the South Carolina Medical Association is a member of the Bureau and its Editor, Dr. J. P. Price, has been on the Executive Board for several years. All the State Journal Advertising Bureau publications follow the advertising standards adopted for the publications of the American Medical Association.

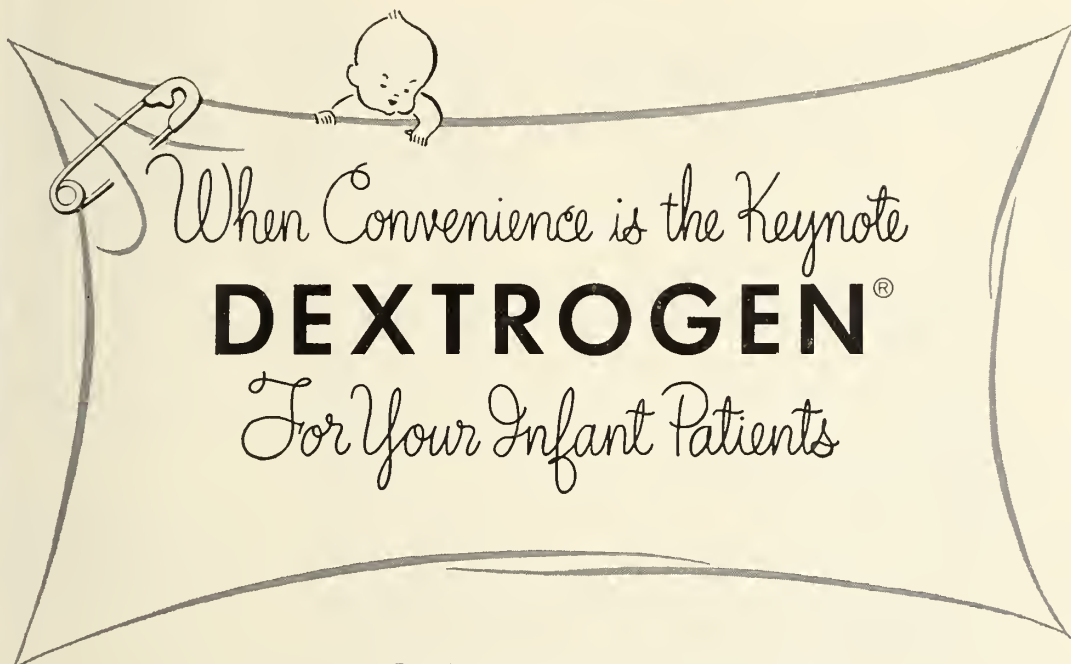
AN ADDRESS delivered at the Statewide Press Conference of the Medical Association of Georgia, Atlanta, Monday, October 2, 1950.

DOCTORS AND THE PUBLIC

By JOHN E. DREWRY

(Dean, Henry W. Grady School of Journalism, The University of Georgia; Vice-President, Association of Accredited Schools and Departments of Journalism; formerly President, American Association of Teachers of Journalism; Author or Editor, "Concerning the Fourth Estate," "Post Biographies of Famous Journalists," "More Post Biographies," "Book Reviewing," "Contemporary Journalism," etc.)

There is probably no name in medical history held in higher esteem than that of the late Sir William Osler, who practiced and taught at Johns Hopkins in Baltimore and at Oxford University in England. He was the author of a book, "Principles and Practice of Medicine," which was a basic text of thousands of contemporary practitioners, and was himself the subject of several important books, one of which, Dr. Harvey Cushing's "The Life of Sir William Osler," published in 1925, won the Pulitzer prize. So wise were Dr. Osler's observations on such a variety of subjects that only this fall—31 years after his death—a new book called "Osler Aphorisms" has ap-



Ready to use and in liquid form, Dextrogen is a concentrated infant formula, made from whole milk modified with dextrins, maltose, and dextrose. In addition, it is fortified with iron to compensate for the deficiency of this mineral in milk. Diluted with $1\frac{1}{2}$ parts of boiled

water,* it yields a mixture containing proteins, fats and carbohydrates in proportions eminently suited to infant feeding. In this dilution it supplies 20 calories per ounce.



The higher protein content of normally diluted Dextrogen—2.2% instead of 1.5% as found in mother's milk—satisfies every known protein need of the rapidly growing infant. Its lower fat content makes for better tolerability and improved digestibility.

Dextrogen serves well whenever artificial feeding is indicated, and is particularly valuable when convenience in formula preparation is desirable.

*Applicable third week and thereafter; 1:3 for first week, 1:2 for second week.

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TO PREPARE**

All the mother need do is pour the contents of the Dextrogen can into a properly cleaned quart milk bottle, and fill with previously boiled water. Makes 32 oz. of formula, ready to feed.*

peared, and undoubtedly it will have a substantial sale. The teaching and personality of this man, according to Webster's Biographical Dictionary, "strongly influenced medical progress," and it is for this reason, among others, that I turn to him for the text of my remarks on medical public relations.

The story is told (in "For Doctor's Only" by Dr. Francis Leo Golden) that one day as Dr. Osler was leaving the hospital, a patient called out from a nearby bed, "Good morning, Doc." The great physician made no reply, but when he reached a corridor, he turned to the interns who were accompanying him and said:

"Beware of the men who call you Doc. Rarely do they pay their bills."

This admonition, with all its public relations implications, is my text of the evening.

What does this statement mean? ("Beware of the men who call you Doc. Rarely do they pay their bills.")

Are doctors primarily interested in their fees?

Do they place money above human relationships?

Do they want the proper distance kept between them and their patients?

Are their ministrations, like their Latin prescriptions, to be expressed in a language classical and incomprehensible to the masses?

Above all, is the attitude of professional medicine toward the public, and the agencies of public relations, a little like that of big business of yesterday: "The public be damned!"?

And is this attitude, as was the case with the corporations, intensified by fear? In the case of business—fear of government intervention? In the case of medicine—fear, again of government, but in this instance known as socialized medicine?

Fear, undoubtedly, is at the bottom of much bad medical public relations. But it is more than fear of socialized medicine. It is a fear much more general and fundamental. It is the fear of the unknown, and in the case of most doctors, the unknown is public relations—its purposes and techniques. Coupled with this frightening ignorance are a training, a tradition, and an ethical concept which eschew publicity. Doctors don't advertise (openly) and they are suspicious of those who get into the public prints (no matter how dignified the reference or reputable the publication). Dr. Osler had something of this point of view—although printer's ink played a far greater part in the establishment of his great reputation than many doctor critics may realize. Wrote Dr. Osler:

"In the life of every successful physician there comes the temptation to toy with the Delilah of the press—daily and otherwise. There are times when she can be courted with satisfaction, but beware! Sooner or later she is sure to play the harlot, and has

left many a man shorn of his strength, namely the confidence of his professional brethren."

The doctor does not, of course, want to be shorn of his strength—of his professional reputation. He is jealous of the esteem in which he personally and his profession are held. He wants, if he be the right kind of physician, to enhance the standing of both. The prescription then, is that of Holy Writ. "Deal thyself." "Know ye the truth and the truth shall make you free." He must analyze the fears that are at the root of many of medicine's public relations problems; he must put into language those that have been un verbalized; he must deal adequately with those which merit attention; and he must free himself of the paralysis of what Roosevelt called the greatest of all fears—fear of fear itself—the professional equivalent of a child's fear of the dark.

What then is the treatment? There is no general panacea, and the several phases of medicine—general practitioner, specialist, hospitals, public health, nurses—all have their special problems. But there are a few general principles which may well serve as the basis of individual or group action.

Do you know and are you concerned about the answers to such questions as these:

What is it about doctors and medical practice that the public does not like?

Which of these complaints have merit, and what can doctors do about them?

What is the public?

Could it be that there is more than one public?

Are doctors, as such, aware of Capital and Labor, of civic clubs and veterans' organizations, of Congress and the Senate, of the Church and public education—and a host of similar groups, all of which are potential friends or enemies?

In the answers to such questions as these lies the beginning of wisdom in so far as good public relations are concerned. As another one of your speakers, Larry Rember of the American Medical Association, has so well put it, "Medical public relations is a continuous process by which the medical profession endeavors to obtain the confidence and good will of the public—inwardly by self-analysis and correction to the end that the best interests of the people will be served; outwardly by all means of expression so that the people will understand and appreciate that their welfare is the profession's guiding principle."

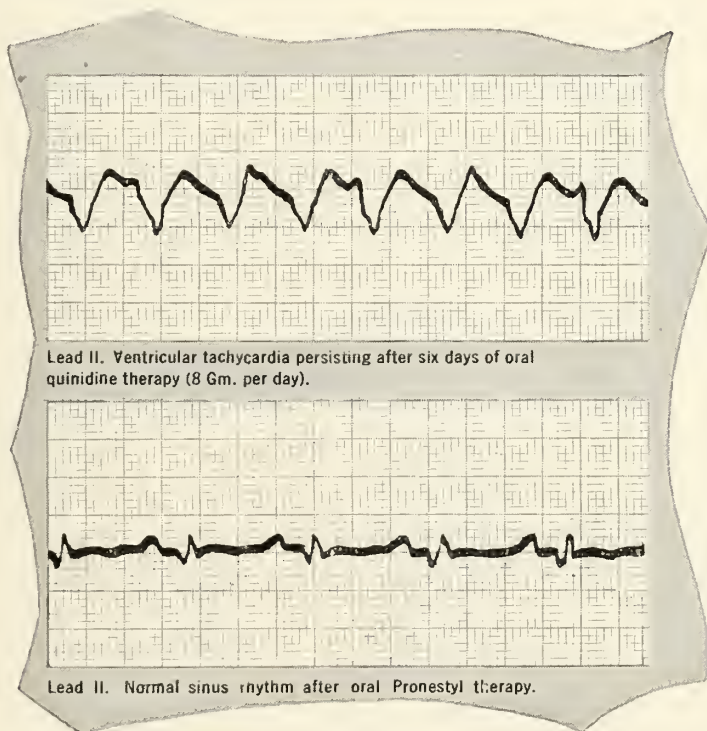
Did you notice that phrase—"by self-analysis and correction?" What are some of the areas in which doctors may well do some professional soul-searching? You know these, of course, better than I, a layman, would. But I have read some things that are not too complimentary to you about fees; about kick-backs in the sale of spectacles, drugs, and through referrals; about keeping patients waiting in your outer offices much too long; about treating the ailment rather than the person; about discourteous brush-offs of newspaper men whose missions are perfectly legitimate;

a **new** drug . . .

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Oral administration of Pronestyl in doses of 3-6 grams per day, for periods of time varying from 2 days to 3 months, produced no toxic effects as evidenced by studies of blood count, urine, liver function, blood pressure, and electrocardiogram. Pronestyl may be given intravenously with relative safety.

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Pronestyl Hydrochloride Capsules, 0.25 Gm., bottles of 100 and 1000.
Pronestyl Hydrochloride Solution, 100 mg. per cc., 10 cc. vials.

For detailed information on dosage and administration, write for literature or ask your Squibb Professional Service Representative.

SQUIBB MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

about unkind references to Reader's Digest, Time, and other publications which are making a serious and intelligent effort to work with and for the medical profession in the attainment of better health for more of the people; about a high and mighty and holier-than-thou attitude toward those whom you are pledged to serve and toward those social agencies, such as the press and radio, which should and would like to be your allies.

Many are the times that I have told our journalism students that the newspaper is for society what the doctor is for the individual, and that this is the age of preventive rather than curative medicine. The press is concerned with the ills of society, just as you are with the ailments of the individual—or states in the language of preventive medicine, the press would promote the health of the body politic just as you would see that the individual remains well. This means that the agencies of communication are potentially your friends. But you must know these agencies, and the men and women through whom they function, if you are to enjoy this friendship and its benefits.

It is not without significance that propaganda—which is just another word for public relations—is of religious origin. The word derives from the College of Propaganda which was instituted by Pope Urban VIII (1623-44) during the 17th century to educate priests. Propaganda or publicity is, therefore, a phase or form of education. And its greatest development has been during the present century. There are some fairly obvious and altogether logical reasons for this, among which are:

1. The complexity of modern civilization makes it impossible for any newspaper to cover all sources of news. This applies equally to the great metropolitan journal with its many reporters and to the small weekly with one man doubling in brass as reporter, editor, advertising and circulation manager, linotype operator, make-up, and press man. It applies also to press services, such as the A. P., U. P., and I. N. S., and to the magazines. Much worthwhile news, therefore, must be provided the press through public relations offices if it is ever to be published.

2. Specialized subjects—and certainly medicine is one of these—need to be treated by those who understand them. A few of the better-heeled newspapers and magazines are able to employ science and medical writers, but the rank and file of publications can do a better job of interpreting medicine to the public if the stories are processed for readability and truth by a public relations man or woman who has the point of view of both the doctor and the press or radio.

3. Institutions and professions supported by and/or serving the public—and these would certainly include hospitals, doctors, dentists, et al—have an obligation to keep their constituencies informed how they are

functioning—their problems, difficulties, and achievements.

4. From the doctor's standpoint—and this may be regarded as the selfish point of view, albeit enlightened selfishness—proper publicity is a lever for the kind of support which medicine, like all professions and social agencies, constantly needs. We have often heard that an offensive war is more easily and more successfully fought than a defensive one. Good publicity—continuous publicity—may be regarded as that offensive which will keep doctors on the victorious side in its many battles—be they against disease and death or the forces of socialized medicine.

5. An important reason for public relations development—one which doctors and others who are publicity shy are likely to forget—is that the newspaper, radio, and magazine, as important social agencies, cannot ignore medical, scientific and educational news. In terms of the onward march of civilization, it is the most important of all news. It is the main skein in the fabric of national and world progress. In the fulfillment of this obligation, journalists are entitled to the intelligent support of the medical world.

6. Possibly the strongest argument for active, aggressive medical public relations—and again this is from the standpoint of medicine, selfish, but enlightened—is the fact that publicity is a safeguard against misrepresentation. One reason that so many persons are sympathetic to socialized medicine may be that that side has been quick to appreciate the truth of this particular argument for propaganda and to put it to practical use.

Which brings us back to that word propaganda—indeed a tricky term. Some cynic has said that whether propaganda is good or bad depends on whether it is ours or that of the other fellow. Certainly the word means one thing for one group, and something entirely different for another. For many, it has an evil connotation. For them, it is something sinister, evil, under-cover, perhaps dangerous. For others (and we, I hope, belong to this group), it is a much abused word of honorable origin and great potential. It is a necessary part of our 20th century mores. It is ours to use wisely through many media.

The agencies of propaganda are many, and each has its special use. Newspapers and radio readily come to mind. So do magazines and pamphlets. But had you thought of schools and textbooks, popular best-sellers and college courses, the church and the movies, as tools of propaganda? Where have people learned so much about socialized medicine? Not in newspapers and magazines alone. Do you know what is being said on this subject in high schools, in university courses in the social sciences, in ladies' reading circles, and in civic clubs and on lodge night? The range, scope, and possibilities of public relations, my friends, are indeed far-reaching. Good propaganda is

they
deserve
the
best..

Implicit in a happy healthy childhood is maximal nutrition—and one of the essential dietetic guideposts to vigorous adulthood is adequate vitamin C^{1,2,9} (1/4-1 oz. for infants up to 1 year;^{10,11} 4-8 oz. for older children).⁴ Fortunately, most every youngster likes the taste of Florida orange juice and the "lift" its easily assimilable fruit sugars² provide.⁶ It is well-tolerated and virtually non-allergenic.³ And, under modern techniques of processing and storage—it is possible for citrus fruits and juices (whether fresh, canned or frozen) to retain their ascorbic acid content,^{5,8} and their pleasing flavor,⁷ in very high degree and over long periods.

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Citrus fruits — among the richest known sources of Vitamin C — also contain vitamins A and B, readily assimilable natural fruit sugars, and other factors, such as iron, calcium, citrates and citric acid.

... plenty of citrus fruit

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quantitative as well as qualitative, extensive and intensive. Are you making the most of your opportunities and obligations?

Medicine is one of the oldest of the professions, but one of the youngest to see the need of organized publicity. I was interested to read that it was only last year that the Medical Association of Georgia inaugurated a public relations program—thus becoming the 22nd such society to employ a full-time public relations director and the 32nd to set up a budget specifically for public relations activities. The church ministry, another old profession, is a newcomer to the public relations field. But much progress is being made. Some of the theological seminaries are adding courses in public relations to their curricula. Possibly medical schools should do likewise. I had a student tell me recently that he was planning to be an undertaker and that he thought journalism would be a good premortician's course. We now have a combination journalism-law course. Medicine, the ministry, and the law are, of course, the classical trilogy among the professions. Two have taken formal cognizance of the place of journalism or public relations of a part of their educational preparation of novitiates. The third, your profession, seems to be toying with the idea. It may not be a bad one.

In conclusion, may I point quickly to some of the good things by way of medical public relations which I think merit commendation.

1. Some of our best books are by doctor-authors. We all are familiar, of course with Dr. Frank K. Boland's "Crawford W. Long," and the tremendous amount of time and energy which Dr. Boland has exerted in behalf of Dr. Long's claim to fame as the first to use ether as an anesthesia. Incidentally, this is a good example of medical public relations at its best. We also remember the great biographies or autobiographies of Hugh Young, Harvey Cushing, the Mayo brothers, and other towering giants of medicine. Perhaps you doctors know, but I doubt whether the public does, that some of our best fiction writers have a medical background. To cite but three among contemporary best-sellers, there are Somerset Maugham, A. J. Cronin, and Frank Slaughter. If we turned back the pages of history, there would be Oliver Wendell Holmes and others of equal stature. Have you ever wondered why some of our best literature is medical in origin? (In the book trade, it is said that books by or about doctors, books about Lincoln, and books about dogs always sell well.) The answer may be in the fact that physicians know life with its ailments, problems, difficulties, achievements, and moments of happiness as no other professional group can. They know life and death and all that comes between. In the language of Robert Peter Tristram Coffin in his memorable poem, "Country Doctor"—

"Through rain, through sleet, through ice, through snow,

He went where only God could go . . .

He left an old man in the dark

And blew up a tiny spark

In a young man two feet long

To carry on the dead man's song . . .

He went to the country's ends,

Not for fees, but for friends.

Came like an angel fierce and fast,

He saw men first and saw them last . . .

Our farms so lonely and spaced far

Could never have grown the nation we are

But for this man, come sun, come snow,

Who went where God alone could go."

2. Our better magazines are devoting more space to your field. *Time*, I think, does a good job with its section on medicine. *Reader's Digest*—in spite of of some doctors' cryptic and critical comments—has carried many excellent articles and has a point of view which is admirable. *Look* magazine, with its illustrated feature on the American Medical Association, and its current article by Margaret Mead on psychoanalysis, has shown enterprise and discrimination in its approach to health subjects. *Atlantic Monthly*, *Life*, *Saturday Evening Post*, and *Ladies' Home Journal* come to mind, and in the case of the realization of pure food and drug laws is indeed a milestone of great importance.

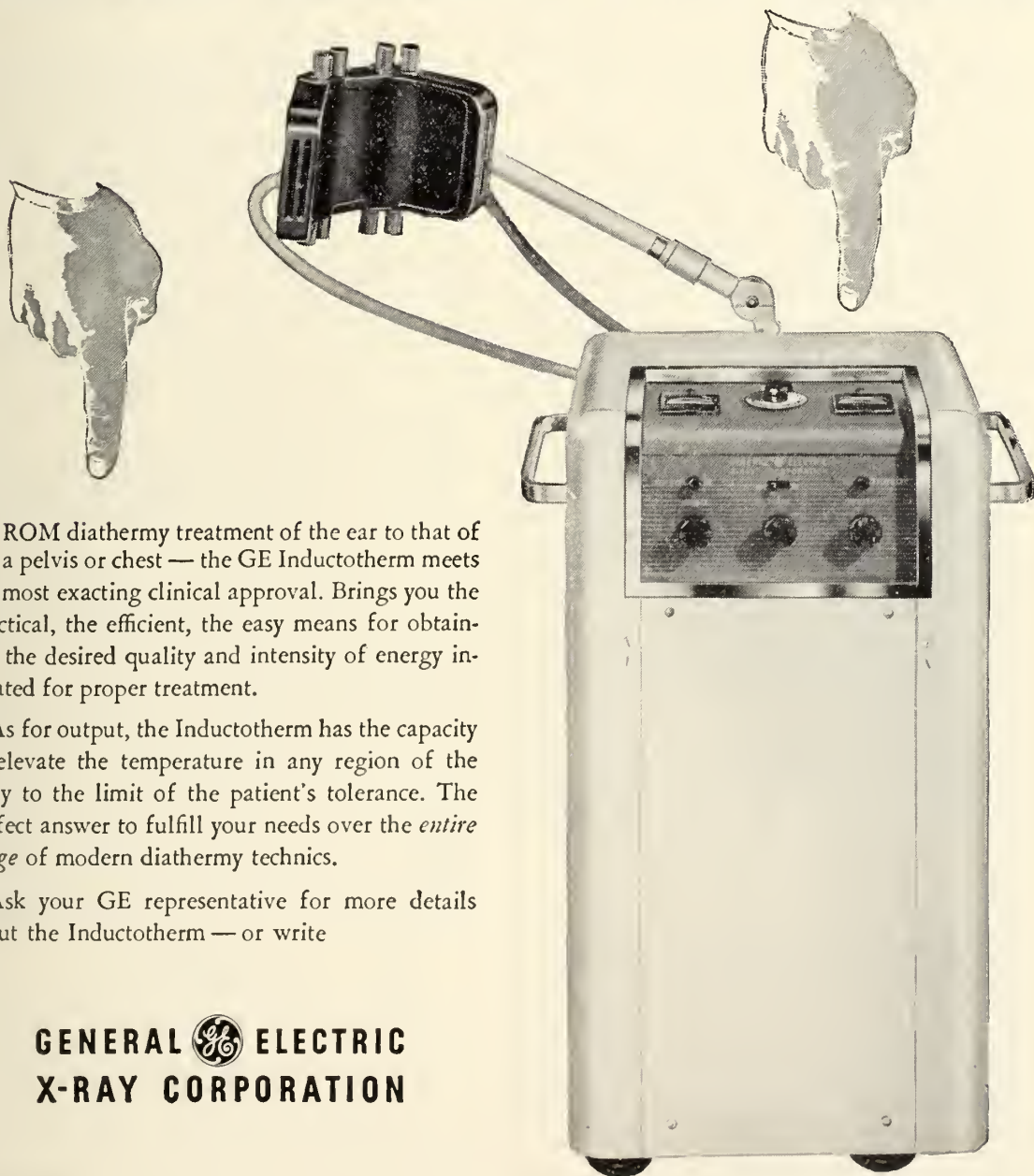
3. All over the country, those newspapers which are financially able to do so are adding reporters and special writers to handle hospitals, medicine, science, and related subjects. Our own Atlanta Journal has pioneered in this form of journalistic progress and has won sectional and national praise for its achievements in this realm.

4. Radio, through local and network programs, is giving more time and better talent to programs that relate to medicine and health. I remember that a Peabody winner in 1942 was "Our Hidden Enemy—Venereal Disease," Radio Station KOAC, Corvallis, Oregon, prepared by Dr. Charles Baker for the University of Kentucky.

5. Television, right here in Atlanta, has demonstrated its usefulness in revealing operation techniques. I was privileged, as were some of you, to see those marvelous demonstrations at the Municipal Auditorium and both the potentialities and actualities of those telecasts were impressive and far-reaching indeed.

There is much more that could be said about what medicine has already accomplished by way of good public relations and also about what is yet to be done. Possibly I have said enough for you to carry both themes forward in your own thinking. To close, I turn again to Sir William Osler—for whom I have great admiration, however much I may disagree with his statement which I used as the text for these remarks. Sir William once said:

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FROM diathermy treatment of the ear to that of a pelvis or chest — the GE Inductotherm meets the most exacting clinical approval. Brings you the practical, the efficient, the easy means for obtaining the desired quality and intensity of energy indicated for proper treatment.

As for output, the Inductotherm has the capacity to elevate the temperature in any region of the body to the limit of the patient's tolerance. The perfect answer to fulfill your needs over the *entire range* of modern diathermy technics.

Ask your GE representative for more details about the Inductotherm — or write

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"Always note and record the unusual . . . communicate or publish . . . anything that is striking or new."

Did you note the key words in that injunction? The *unusual . . . communicate . . . publish . . . striking . . . new.*

How like the classical definition of news which is in every primer of journalism!

If a dog bites a man, it is not news, but if a man bites a dog, news it is.

The *unusual . . . the striking . . . the new.*

DEATHS

ARCHIBALD EARLE BAKER

Dr. Archibald E. Baker, 54, died in Charleston on January 25 after several months of illness.

A native of Charleston, Dr. Baker was graduated from Davidson College and from the Medical College of S. C. (Class of 1921). Following postgraduate work in New York and at the Mayo Clinic, he returned to Charleston in 1923 to become associated with his father, the late Dr. A. E. Baker, in the practice of surgery. At the time of his death, Dr. Baker was president of Baker Sanitarium, a visiting surgeon at Roper Hospital, and a member of the surgical teaching staff at the Medical College. In 1949 he served as President of the Medical Society of S. C. (the Charleston County Medical Society).

"Archie," as he was known to a host of friends throughout the state was a lovable individual and a gracious host, and in his passing the physicians of the state have lost a loyal colleague. He is survived by his wife, Mrs. Ann Bissel Baker, two daughters, and one son.

ARTHUR ERNEST SHAW

Dr. Arthur Ernest Shaw, 75, oldest practicing physician in Columbia, died at his home on the afternoon of February 8.

Upon graduation from Jefferson Medical College in 1905, Dr. Shaw came to Columbia in company with the late Dr. George Bunch, and both of these men served for a period as assistants to the late Dr. LeGrand Guerrv. Subsequently Dr. Shaw established his own practice in general practice with particular interest in roentgenology.

HENRY A. EDWARDS

Dr. Henry A. Edwards, 76, died of a heart attack on February 8.

Dr. Edwards was graduated from Wofford College and from Vanderbilt Medical College (1899). He opened his office in Latta in 1900 where he carried on the practice of general medicine up to the time of his last illness. Gifted with a keen mind and an observant eye, his services were in great demand and those who knew him recognized him as a true "family physician."

Dr. Edwards is survived by his widow, the former Miss Florence Mullins, and one son.

JOHN VICTOR TATE

Dr. John V. Tate, 70, died at his home in Calhoun Falls on February 6.

A graduate of Emory Medical School (1907), Dr. Tate had practiced at Calhoun Falls for over forty years. He was loved by those in his little community and in his death they have lost a real friend.

NEWS ITEMS

Dr. Paul P. Hearn is now associated with Dr. J. W. McLean of Greenville. Dr. Hearn's practice will be limited to otolaryngology.

Dr. Bruce Edgerton of Blackville has opened an office in Springfield.

Dr. William Craig, Jr. has resumed his practice in Pickens.

Dr. J. G. Sylvester has opened offices in Florence for the practice of surgery.

Dr. William Marion Bevis has joined the staff of the Edgewood Sanitarium at Orangeburg.

Dr. James A. McLeod of Florence has left his growing practice in Florence to join the medical corps of the United States Army.

Dr. P. J. Moore, Jr. of Pickens, was elected President of the Pickens County Medical Society for the year. Dr. C. E. Ballard was elected Vice President and Dr. W. R. Craig, Jr., Secretary-Treasurer.

The following physicians were elected officers of the Georgetown County Medical Society: President, Dr. E. T. Kelley; Vice President, Dr. Harry Tiller; Secretary-Treasurer, Dr. S. E. Miller.

Florence County Medical Society officers elected to serve in 1951 are: President, Dr. W. J. Jenkins, Olanta; Vice President, Dr. J. D. Ellis, Florence; Secretary-Treasurer, Dr. J. H. Stokes, Florence.

BIRTHS

Dr. and Mrs. L. E. Mays of Seneca, are the proud parents of twins, a girl and a boy, born January 20.

Dr. and Mrs. Hugh Smith, Jr., of Greenville, have announced the birth of a daughter, born January 20th.

Three babies were born in Greenville on January 22, all of them children of physicians as follows:

To Dr. and Mrs. M. Nachman, a daughter.

To Dr. and Mrs. Homer Parnell, a son.

To Dr. and Mrs. Thomas Parker, a daughter.

Was this Doctor's Day?

WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. A. F. Burnside, Columbia, S. C.

Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.

If winter comes—spring is just around the corner, and with the thought of spring comes the happy realization that the meeting of the Woman's Auxiliary to the South Carolina Medical Association is not far away.

It climaxes a year's hard constructive work for our President, and those associated with her; the reunion of old friends and the meeting of new ones. A time we've waited for with joy and anticipation.

The convention Committee has been working on plans for your pleasure and surprise, and although ominous war clouds again hang over our nation, we have gone forward with exciting plans as though Peace were reigning supreme.

So draw a red circle around these middle-of-the-month-of-May-days on your calendars, and come to this meeting to do honor to our President, Mrs. Alfred Burnside, who has given unstintingly of her time and talents to make our Auxiliary an even better and more efficient organization, and enjoy with her the fruits of her year's work.

The Convention Chairman, and each of her committee cordially invites you to be present at this meeting.

Place: Myrtle Beach
Dates: May 15, 16, 17
Elizabeth S. Durham
(Mrs. Robert B.)
Convention Chairman
Jerry Libbert
(Mrs. K. M.)
Co-Chairman

VOLUNTARY PLANS GROWING RAPIDLY

In an address delivered by Dr. Elmer L. Henderson, President of the American Medical Association, before the United Medical Service of New York, he emphasized the fact that within the ten year period that Voluntary Health Insurance Plans have been in effect, they have demonstrated their widely growing popularity. "At the end of 1949, we knew from the last annual report of the Health Insurance Council, more than sixty-six million Americans had some kind of voluntary insurance protecting them against hospital, surgical, or medical expenses. It is a conservative estimate, based on all known developments in 1950, that between seventy and seventy-two million Americans now have some form of Voluntary Health Insurance The prediction of medical economists that ninety million Americans will be protected by Voluntary Health Insurance within the next two or three years . . . is well in its way to fulfillment . . . and the advocates of socialized medicine are fast losing all semblance of a case."

From "A New Milestone in Prepaid Medical Care," an address by Elmer S. Henderson, M. D.

SUGGESTED BULLETINS TO BE USED

March Issue—Bulletin #1

Haddon Hall will be the headquarters for the Annual Meeting of the Woman's Auxiliary to the American Medical Association, which will be held in Atlantic City, New Jersey, June 11-14, 1951.

ENDORSEMENT CAMPAIGN ACCELERATED

Aware of the fact that Congressman Dingle has introduced a new bill for National Compulsory Health Insurance (H. R. 54), and knowing further that the Administration is still eager for the adoption of its socialistic legislative program, the Legislative Committee of the South Carolina Medical Auxiliary has accelerated its campaign for endorsements from S. C. organizations willing to take a stand against Compulsory Health Insurance. This letter has gone out to all County Chairmen of Legislation urging them to renew their efforts for endorsements. They have been asked to work particularly hard with the S. C. Parent-Teachers Groups. Local P. T. A. Groups cannot pass independent resolutions against socialized medicine, but they can approve a set of resolutions and express a desire to have the resolutions presented for adoption at the annual convention of the South Carolina Congress of Parents and Teachers to be held in Spartanburg in April. Doctors' wives can be of invaluable assistance by being present at their P. T. A. meetings and supporting the action when it is presented.

The services rendered in the community by the physician is so cheerfully, quietly, unassumingly given that few people realize until he passes on what a place of importance he has filled. In South Carolina there have been hundreds of these noble, self sacrificing men who have given their lives in service for their fellowmen. How can the Auxiliary to the South Carolina Medical Association do these men greater honor than by preserving their memories through biographies secured from relatives and friends to be placed in the Archives of the organization! These Archives will always be a permanent record of the achievements of these doctors of our State and source material for historians.

I should like to impress upon each member of the Auxiliary her responsibility in assisting the Historian of the local Auxiliary by furnishing her with information useful in writing biographical sketches of deceased physicians. I am sure she will welcome all the assistance you can give her.

Some of the older Auxiliaries have kept their records up to date; however, in those sections where Auxiliaries have recently been formed there should be much valuable data compiled this year, reaching far into the past, to those early physicians who served in the lower part of South Carolina in the "Horse and Buggy Days."

The County Historians would like to complete their records by April 1st and send their reports to the State Historian on that date, so if you have any information suitable for these biographical records please contact your local historian.

Below is a list of the County Auxiliary Historians:

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Mrs. Bruce Swain, Anderson, S. C.
1208 N. Main Street

CHARLESTON

Mrs. M. W. Beach, Charleston, S. C.
3 Glenwood Avenue

Carolina Rest Home Hospital



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Mrs. W. A. Stuckey, Sumter, S. C.

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Mrs. J. L. Bundy, Rock Hill, S. C.
733 Eden Terrace

Plan to Attend

Annual Meeting

S. C. Medical Association

May 15, 16, 17

Myrtle Beach

Ocean Forest Hotel

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 M. L. Meadors, Business Manager, West Cheves Street,
 Florence, S. C.

EASTER SEALS AT WORK

A four year old girl from Calhoun County, Patricia Zeagler, has been selected as the 1951 Easter Seal Girl of South Carolina, a living symbol of how the annual Easter Seal Campaign helps millions of crippled children toward their goal for happy useful lives.

Patricia is the daughter of Mr. and Mrs. O. K. Zeagler, Jr. of Lone Star. A beautiful little girl, she had the misfortune to suffer gangrene poisoning when she was about a year old. Amputation below the right knee followed. She has been using a caliper since 1948. This will be replaced with an artificial limb soon.

A precious child, Patricia is today happy and in excellent physical condition. Her prospects for a normal adult life are good.

Children like Patricia, in every section of the state, have received assistance because of Easter Seals, which extend and supplement, but do not duplicate the work of other agencies.



Give Now!

Can you think of a finer way to celebrate Easter? Your gift will bring new life, new hope to handicapped children. So many children need proper medical care and special training. Give generously now.

**18th Annual
EASTER SEAL
APPEAL....**

Feb. 25 to Mar. 25

The Journal

of the

South Carolina Medical Association

VOLUME XLVII

April, 1951

NUMBER 4

The Treatment Of Fibromyomas Of The Uterus

J. R. YOUNG, M. D., Anderson, S. C.

AND

J. H. YOUNG, M. D., Boston, Mass.

The object of this paper is to emphasize the fact that often times myomectomy is a satisfactory operation for the relief of uterine myoma and in selected cases it is the operation of choice.

Fibromyomas were said by Kelly and Cullen to occur in one-third of negro women over twenty years of age and in about ten percent of whites of the same age. In our experience it is the most common tumor requiring pelvic surgery and is relatively more common in nullipara. Several methods of treatment are at our disposal varying from total hysterectomy to masterful neglect when the tumors are small and asymptomatic. If we were able to disregard the function of the uterus treatment of uterine fibromyoma would be greatly simplified. However in a woman of child bearing age having uterine fibromyoma we would have to consider the problem as a benign tumor in an organ whose function we wish to preserve. This can best be accomplished by myomectomy. There is possibly general agreement as to this being the procedure of choice in cases of pedunculated fibroids. But when the tumors are quite numerous and intramural and are submucous and possibly come off the lateral aspect of the uterus and present beneath the broad ligaments there is perhaps too great a tendency to do radical surgery on such patients without exploring the possibilities of multiple myomectomy.

We think it especially important to weigh carefully the possibilities of conservative surgery in women who are childless and are very desirous of having children. It may be impossible to tell whether conservative surgery can be satisfactorily carried out until the effort is made. The number or position of the nodules or separate tumors may on inspection and palpation seem to indicate that hysterectomy would be the operation of choice. However, if the tumors are taken one at a time and carefully dissected out regardless of their position usually the uterus can be reconstructed. If the uterine cavity is opened and submucous tumors removed the uterus can be closed and normal uterine function retained.

It was formerly pointed out by critics of this conservative operation that it was more dangerous than hysterectomy. However, in a report from Mayo Clinic in 1926 before the day of antibiotics and other modern adjuncts to surgery the mortality in 250 cases of abdominal myomectomy was 0.77 percent as compared to a mortality in 1643 of abdominal hysterectomy of 1.88 percent. Under present day conditions when expert anesthesia, blood transfusions and antibiotics are available in any good hospital such operations should carry no mortality beyond that unpredictable hazard of surgery which refuses to be wholly cancelled out by modern safety methods.

Another argument against myomectomy has been the tendency to recurrence of the tumors. Those recurrences probably represent the continued growth of small nodules which were not removed at the time of previous surgery. However the presence of multiple small recurrent nodules may not be indicative of further surgery. Such nodules may be entirely asymptomatic.

We have been impressed by a few cases which gave a history of sterility and in which pregnancy occurred following myomectomy. Such a case was the following. Mrs. G. age 30 had been married six years without pregnancy. Her menstrual history was about normal. She was found to have a fibroid uterus, multilobular, that was about the size of a four months' pregnant uterus. At operation multiple myomectomy was carried out. The myomas which were removed were much larger than the uterus which remained. In dissecting out one large tumor the uterine cavity was opened. This was an intramural fibroid but it was larger than the uterus itself and extended to the mucosa of the uterine cavity. The uterus was satisfactorily sutured after all myoma had been removed. Recovery and convalescence were uneventful. A year later this patient became pregnant and was delivered by section of a full term normal male infant.

We have also seen cases in which abortion occurred in a pregnant fibromyoma uterus and in which preg-

nancy went to full term after myomectomy. The following is illustrative. Mrs. B. age 35, was admitted on account of uterine bleeding. She had missed three periods and had been bleeding for 24 hours. She aborted a few hours after admission. She was found to have a multilobular fibroid uterus and a few months later she was re-admitted and multiple myomectomy was carried out. This patient had numerous subserous and intramural nodules which were carefully removed. Convalescence was normal. About 18 months later this patient was again admitted and delivered by section near term of her first baby.

We have recently done a total hysterectomy upon a patient on whom we did a myomectomy 24 years ago for relief of sterility. The sterility was relieved and the patient was delivered by section of her only child two years later. This patient had a normal menstrual history for about 20 years after her delivery and then the menopause. On account of uterine bleeding three years after menopause she was recently operated upon. She had a few small fibroid nodules, one of which

submucous nodule was degenerating. A total hysterectomy was done.

When hysterectomy is done for fibroid uterus we think it should be a total hysterectomy for two reasons. (1) The cervix is usually diseased and its removal will discourage leucorrheal discharge. (2) It has been found that two or three percent of women who have had a supra-vaginal hysterectomy develop cancer in the cervical stump. If all women who need a hysterectomy had a total hysterectomy done many cancer deaths would be avoided.

In summary then our plea is that the treatment of uterine fibroids be individualized and not rigidly standardized. We strongly recommend in the younger women of child-bearing age, particularly where no children have been borne, that conservative surgery be practiced. In women of the older age group who have several children more radical surgery is certainly indicated and in our opinion a total hysterectomy is the procedure of choice.

Lateral Herniations Of Cervical Discs

CHARLES J. LEMMON, JR., M. D.
Columbia, S. C.

Cervical intervertebral discs may rupture with herniation of the nucleus pulposus either in the mid portion with spinal cord compression or laterally with nerve root compression (Fig. 1). The spinal cord compression of the centrally placed ruptured disc presents symptoms like those of a spinal cord tumor and is handled accordingly. The nerve root compression from the lateral herniation presents symptoms of a radicular nature. This article is confined to consideration of lateral herniation of cervical discs.

The syndrome caused by lateral herniation of cervical discs is remarkably constant and the specific nerve root involved can usually be identified clinically. There may or may not be a history of trauma. These patients usually present themselves with symptoms of severe shoulder and arm pain. They may also have neck, occipital and chest pain on the involved side. Stiffness or a "crick" in the neck may be or have been present. Often there is no neck discomfort at all when the patient is seen so that the physician's attention is directed entirely to the shoulder and upper extremity. The pain is frequently aggravated by movement of the head and neck and by coughing, sneezing and straining.

Characteristically the pain is at the base of the neck, tip of the shoulder, over the scapula, down the arm

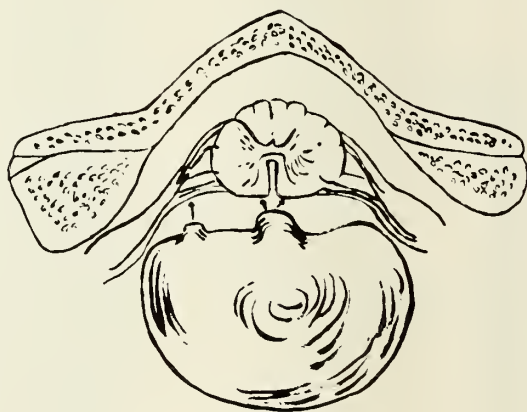


FIGURE 1

to the elbow and occasionally over the chest in the region of the pectoralis tendon. Sometimes the pain extends into the hand but more commonly numbness and paresthesias are present in the hand.

Numbness and paresthesias are very important in helping to identify the nerve root involved. The 7th. cervical root (between C6 and 7) affects chiefly the middle finger and occasionally the index finger and the ring finger. The 6th. cervical root (between C5 and 6) affects chiefly the thumb and index fingers. (Fig. 2)

^oPresented before the Spartanburg County Medical Society on September 26, 1950.

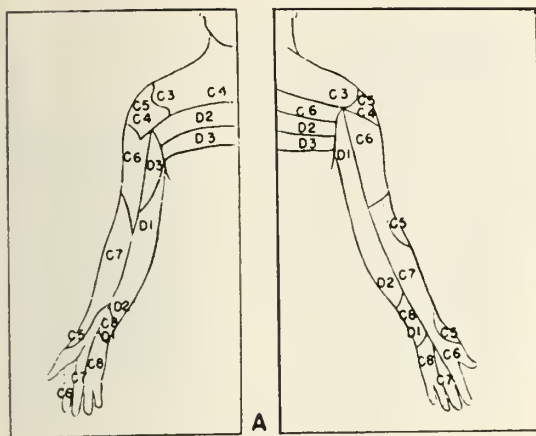


FIGURE 2

Whereas the numbness and paresthesias are fairly well localized in an individual case, the pain is very wide spread and may involve on one side the occipital region, neck, scalpula, tip of shoulder, pectoralis tendon area of chest and the entire upper extremity. This widespread pain certainly cannot be accounted for by pressure on one cervical nerve root. It is probable that annulus fibrosus and ligamentous referred pain may cause this widespread dull ache.

NEUROLOGICAL EXAMINATION:

Sensory examination may reveal minimal or no findings even with marked subjective symptoms. Demonstrable sensory changes are sometimes present in the radicular pattern in severe cases and are of considerable importance in identifying the specific nerve root involved. The foraminal compression test is of value especially in patients whose sensory changes are in doubt. This test is performed by tilting the head and neck toward the painful side and applying pressure to the top of the head. The patient's pain and a distinct radicular pattern of paresthesias may be reproduced.

Motor weakness is so difficult to evaluate because of the pain and the double innervation of the biceps and triceps that it has not been of help in diagnosis or localization. The biceps is supplied chiefly by the 5th. and 6th. cervical nerves, the triceps by the 7th. and 8th. cervical nerves.

Sometimes the reflex changes are very definite and then are a great aid in localization. Even when motor loss is partial, the corresponding tendon reflex from biceps or triceps may be lost or obviously diminished. A diminished triceps reflex suggests pressure on the 7th. cervical nerve, and a diminished biceps reflex suggests pressure on the 6th. cervical nerve. When its opposing muscle is definitely weakened, the biceps and triceps reflex may appear increased.

Spinal tenderness at the level of the lesion is a frequent finding.

ROENTGENOLOGICAL EXAMINATION:

On the lateral x-ray narrowing of the affected intervertebral space is frequently present from loss of substance. The normal lordotic curve is almost invariably changed. Oblique views may reveal narrowing of the nerve foramina or bony spurs projecting into them.

Pantopaque Myelography is a valuable and reliable aid in the diagnosis of lateral herniation of cervical disc and also confirms its exact location.

TREATMENT:

When a disc is suspected clinically a conservative regime of therapy is instituted, unless signs of cord compression are manifest, then an immediate laminectomy is performed. In a mild case of ruptured cervical disc with lateral protrusion of the nucleus pulposus, simple bed rest with analgesics may be all that is necessary. Usually if the symptoms are severe enough to cause the patient to seek medical attention, halter traction with 5 to 10 pounds of weight will be necessary for relief. If, when the patient is up and about there is some return of pain, it is probably best to have a cervical collar worn for a few weeks. If there is no relief of radicular pain and muscle spasm in 3 or 4 days on the conservative therapy with halter traction, then it is doubtful that further conservative therapy will be of benefit. In that case operation is the treatment of choice.

When conservative measures fail to bring relief operation is indicated. A Pantopaque myelogram is done which confirms the diagnosis and reveals the exact location of the herniated disc. A hemilaminectomy is performed and the nerve root decompressed and herniated disc removed. Sometimes the disc is ossified so that it is necessary to chisel it away. Occasionally venous bleeding is so brisk that it is better to allow the ossified disc to remain and remove enough bone posteriorly so that the nerve root can lie over the ossified disc without compression. Proximity of the cervical cord precludes the use of coagulation in this area, so when a large plexus of veins is encountered the operation becomes very tedious, time consuming, and potentially dangerous.

POSTOPERATIVE TREATMENT:

No special postoperative precautions are necessary. Some patients become comfortable almost immediately while others have root pain for several days due to previous root pressure and operative manipulation.

The above presentation is a didactic review of the diagnosis and treatment of lateral herniation of cervical discs. The following two case reports bring out some of the variations and problems encountered in clinical practice.

The first case report is of a 41 year old white female, single, secretary.

CHIEF COMPLAINT: Severe incapacitating pain in the left upper extremity.

This patient was in an auto wreck about 12 years ago from which she recovered completely. About one month prior to admission the patient awoke one morn-

ing with a "crick" in her neck, accompanied by severe pain in the left shoulder and down the left arm to the elbow. This condition gradually cleared up. About one week prior to admission she fell down the steps backwards and in attempting to right herself caused a severe pain in her neck, shoulder, arm, upper thorax, and occipital region. She noted a numbness in the left thumb and index finger (Fig. 2). The pain was so severe that she could not work. The pain was aggravated by coughing, sneezing or straining and by sitting upright at her desk.

The positive findings on neurological examinations were an absent left biceps reflex, hypalgesia over lateral aspect of left arm. (Fig. 2).

DIAGNOSIS: Cervical Dise, Ruptured, between cervical vertebrae 5 and 6, compressing the 6th cervical nerve root.

X-rays of the cervical spine revealed some localized changes having the appearance of an old injury with traumatic osteoarthritic changes. These arthritic changes were not in the region suggested by the clinical examination so these were thought to be incidental findings. (Fig. 3).

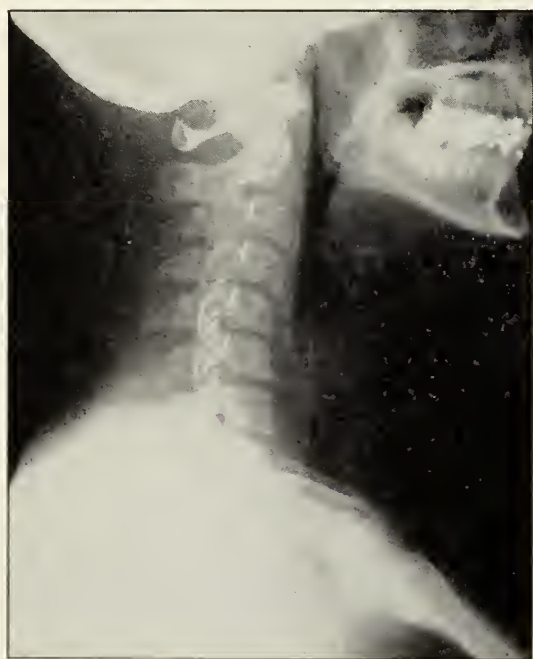


FIGURE 3

The patient was put to bed and halter traction was applied with 5 to 10 pounds of weight. There was no consistent relief after 3 or 4 days so a pantopaque myelogram was done and revealed a constant filling defect in the left side of the spinal canal in the region between C5 and C6. (Fig. 4). This filling defect was constant at all times and was well demonstrated on the films. An x-ray diagnosis was made of a ruptured

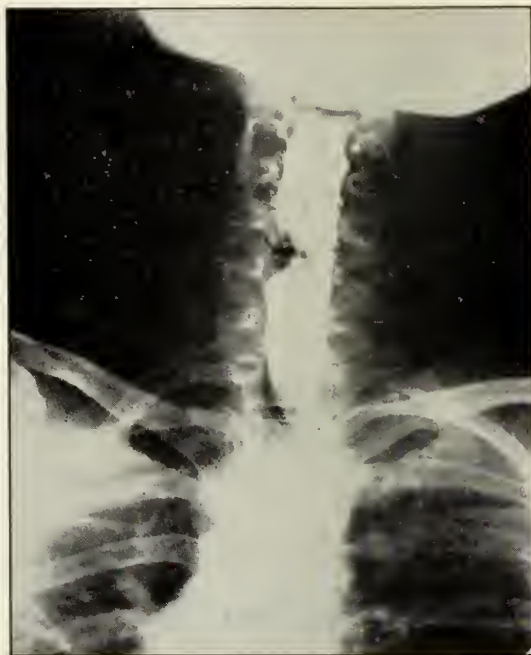


FIGURE 4

intervertebral disc on the left between C5 and C6, which substantiated our clinical impression.

On April 20, 1950, a cervical hemilaminectomy was performed with decompression of the 6th cervical nerve root. The ruptured disc was very large and proved to be ossified. A large plexus of veins was present and considerable bleeding was encountered each time these vessels were manipulated. In view of the technical difficulties and the ossified disc it was decided to perform a complete decompression of the nerve root so that the nerve root could ride over the ossified disc without danger of compression.

POSTOPERATIVE COURSE: There was some pain relief immediately and in the next several days before discharge the residual pain gradually cleared up. At discharge the numbness was better but still was present in the thumb and index finger. The biceps jerk remained absent.

Follow-up examination on June 2, 1950 revealed that the patient was getting along fine. She was completely comfortable at rest, however after being up and about all day with her left arm hanging by her side, she did get a slight pain in her shoulder and over the scapula. This discomfort could be alleviated by supporting the left arm inside her blouse and taking the weight of the arm off the neck region. The numbness in the index finger had completely cleared up, however, there was still a slight amount of numbness in the thumb. The biceps reflex was absent.

She was seen again on June 30, and August 4. She stated she felt fine, was free of pain and working full time. The index finger was perfectly all right and the

thumb was still a little numb. The biceps reflex remained absent. The absent reflex and the numbness are likely to be permanent. She has noticed an ache in the shoulder when she gets tired. When shopping all day with her arms hanging by her side, an ache develops in the shoulder that is relieved by holding her pocketbook in the axilla and thereby raising the shoulder. It is probable that when the muscles of the neck and shoulder become tired from the arm hanging down that there is some pull on the nerve root over the ossified disc. It is almost certainly better to remove the disc, however if it is not technically feasible a satisfactory result can be obtained by decompression alone, provided the disc is ossified and is not of the soft type. A soft disc would probably undergo further herniation, and, in spite of a satisfactory decompression, lead to further pain.

The second case report is of a 67 year old white male, farmer, who was admitted to the Columbia Hospital on April 2, 1950. He gave a history that on March 20, 1950 after a hearty meal he noted a substernal pain which radiated down the left arm. The pain was very severe. He also noted shortness of breath, nausea and vomited almost everything he ate. At times the pain would ease, but attempting to eat or any movement of his head would re-initiate the complaint. He remained in this severely painful condition for a week before he was hospitalized. On admission to the hospital he complained bitterly of pain, and was very restless, tossing from side to side in his bed. The pain was limited to the left upper extremity, neck, occipital region and side of the thorax. Thorough examination by a cardiologist failed to reveal any cause for his pain. The pain gradually improved and he was discharged on May 4, 1950. Two weeks later, on May 17, 1950 he was re-admitted to the Columbia Hospital with an admission diagnosis of: question of coronary disease. After his first discharge he continued to have the same severe constant pain in the chest and arm until he felt that he could not stand it any longer and returned to the hospital for relief. A recheck of the cardiac condition did not reveal the cause for his discomfort.

X-ray's of the cervical spine, lateral, AP and oblique views, showed quiet marked osteoarthritic changes of cervical vertebrae. "There is some narrowing of the intervertebral space between C5 and 6 and between C6 and 7. There are quite marked osteophytes on posterior margins of the bodies which may well cause irritation of nerves. There is some encroachment on the intervertebral foramen between C3 and 4 bilaterally."

Neurological examination on May 20, 1950; History of Pain in the neck, shoulder, arm, occipital region and chest wall, left, coming on while chopping wood about six weeks prior to the present admission. He also complained of some numbness in his left upper extremity which was more marked in the middle and ring fingers. Sensory examination revealed hypalgesia

over the entire left upper extremity. Left abdominal reflex was diminished and both cremasteric reflexes were absent. No other abnormalities were found on the neurological examination. He had received large doses of opiates and barbiturates and was in a rather wild state so that the history and examination were not too reliable. He was undoubtedly in severe pain. Repeated examinations were done in an effort to get at the seat of his trouble.

On very close questioning about his pain it was determined that he had pain in his neck, lower occipital region, arm and forearm, over the shoulder and scapula, across the upper chest and the pectoralis tendon region into the axilla. The whole hand and fingers were numb. The numbness was much greater in the ring and middle fingers.

This man had been suffering intensely for almost two months. It was necessary to give him large doses of sedatives and narcotics for temporary relief. The relief was short lived and at times due to the medication he was somewhat delirious. Traction with 5 to 10 pounds of weight had been used without success, possibly due to the extensive osteoarthritis which was present and interfered with traction. Also, when a myelogram was attempted it interfered with this examination. Because of the extensive osteoarthritis which was present, it was felt that an osteophyte was probably compressing one of the nerves and was the cause of the pain. His pain was so intense that it was obvious that some more radical procedure would be necessary.

On May 25, 1950 a cervical hemi-laminectomy was performed on the left side. Usually from the clinical and myelographic findings the specific nerve root involved can be identified and it is necessary only to explore one space. In this particular case due to the widespread osteoarthritic changes and the unsatisfactory myelogram, it was thought best to examine the space probably involved, also, the one above and below it. These three spaces were carefully decompressed and inspected for evidence of a ruptured disc. After decompression of the last space, C6-7, the nerve root was gently moved aside and immediately a large disc began to extrude by itself. With a little help from a pituitary rongeur and a curette the space was emptied, the wound was closed, and the patient returned to the ward in good condition.

Following the operation the patient received a great deal of relief immediately and in spite of some pain it was not necessary to give him a single dose of narcotic. One week after operation he was discharged home and was very much pleased with the results of the operation.

He was seen two weeks later on June 16, 1950 and said that his pain was all gone, however there was some soreness over the shoulder and upper chest at times.

He was seen again on July 14, 1950, his pain had remained gone, his strength was getting better, however he still had some residual numbness in the ring and especially the middle finger.

This case, in a 67 year old man with marked osteoarthritic changes and osteophytes, reveals the dramatic pain relief from surgery when all the usual conservative measures had failed.

CONCLUSIONS:

(1). The syndrome caused by lateral herniation of a cervical disc and the specific nerve root involved can be diagnosed from clinical findings alone.

(2). The vast majority of cases are amenable to

conservative medical therapy.

(3). In those cases not amenable to medical therapy, the diagnosis and the specific nerve root involved can be verified by pantopaque myelography and relief obtained by surgical removal of the herniated cervical disc.

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Gastroileostomy

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Gastroileostomy is a serious surgical error resulting in profound metabolic disturbances to the patient. This condition is rather infrequently reported. It is our opinion that this lesion is not as rare as one is led to believe since reports of surgical errors are not frequent.

The first case of gastroileostomy was reported by Martin and Carroll¹ in 1915. Polivy² recently collected a total of twenty-seven cases from the literature and added another case.

It is the purpose of this paper to report a case of gastroileostomy and point out the symptomatology and metabolic disturbances attendant such a surgical error.

CASE

The patient was a 64 years old white married male who was referred on February 21, 1950, with a chief complaint of marked diarrhea, nausea and vomiting of approximately four years duration. He averaged from four to ten loose stools daily and vomited from ten to twelve times a day.

He gave a history of having had indigestion for a period of approximately seventeen years. Four years before admission, a diagnosis of a duodenal ulcer was made, and the patient was operated upon and some type of gastroenterostomy was done.

Following surgery, the patient had marked abdominal distention, nausea, vomiting and diarrhea.

He lost approximately 60 pounds in weight and noted marked ankle edema, weakness and cachexia.

The physical examination revealed a poorly developed, emaciated, cachectic white male appearing chronically ill. The temperature, pulse and respiration were normal and the blood pressure was 100/70. The skin was coarse, loose and dry with evidence of marked weight loss. Both lower extremities were scaly

and edematous. There was no local or general lymphadenopathy and the examination of the head, eyes, ears, nose, mouth, and throat was negative except for a red, slick, atrophic tongue. The heart and lungs were normal. The abdominal examination revealed a well-healed, upper-midline abdominal incision. The abdomen was distended and tympanitic and there was considerable borborygmus and visible peristalsis. No masses were made out. The rectal examination failed to reveal any masses and the prostate was normal in size and consistency.

The hemoglobin was 76% and the white blood count 8,900 with a normal differential. The total serum proteins were 4.8 grams with the albumin fraction being 3.6 grams, and the globulin fraction 1.2 grams. The gastric analysis failed to reveal free hydrochloric acid, however, there was a total acidity of 16.5°. The blood Kahn test was negative. The urine was negative except for a one plus albuminuria.

A barium enema revealed the entire colon to fill readily without a filling defect. There was scattered gas in the small intestine with moderate dilatation of several short segments of small intestine. No communications between the small and large bowel or stomach were demonstrated.

A diagnosis of a possible gastro-jejuno-colic fistula was made in spite of the fact that no barium passed from the colon into the small intestine or stomach. A gastrointestinal x-ray study was not done because of the finding of a partial, mechanical, small bowel obstruction.

The patient was placed on large doses of vitamins, fluids, and electrolytes and received several blood transfusions in preparation for surgery.

On March 1, 1950, the patient was carried to the operating room. The abdomen was entered through an upper-left, paramedian, abdominal incision. Explora-

tion revealed a post-colic gastroileostomy with partial intestinal obstructions near the gastroenterostomy due to adhesions and agglutination of the intestine.

A resection of the terminal ileum and gastroileostomy was carried out with closure of the stomach. An ileo-transverse colostomy was then performed since the resection was only a few centimeters from the ileocecal valve. There was an old duodenal ulcer cicatrix with slight partial obstruction at the pylorus. Due to the patient's poor condition, no further surgery was done.

The patient had an uneventful postoperative course and was discharged from the hospital eighteen days later.

The patient's weight on admission was 92 pounds and three months later, he had gained to 134 pounds. The total proteins had risen to 6.7 grams with the albumin fraction being 5.1 grams with the globulin fraction 1.6 grams. The hemoglobin was 83% and the white blood count was normal. The urine still revealed albuminuria.

The patient's nausea, vomiting and diarrhea completely ceased following surgery.

DISCUSSION

In a patient who develops nausea, vomiting and diarrhea following gastric surgery, one must strongly consider a gastro-jejuno-colic fistula. In the differential

diagnosis, however, a possibility of a gastroileostomy must always be kept in mind.

The reason the reported case did not suffer more nutritional insult than he did was due to the fact that the pylorus was patent and nutritional contents passed from the stomach into the pylorus and down through the jejunum and ileum before re-entering the stomach. Undoubtedly, some of the gastric contents passed from the stomach directly into the ileum which accounted for the marked diarrhea.

It is imperative that recognition of such a surgical error be prompt in order to avoid the catastrophic nutritional disturbances inherent with a gastroileostomy. More profound nutritional changes may be expected should a gastric resection be performed since all gastric contents would pass directly into the ileum. Ulceration of the ileum has been reported as a result of gastric acid bathing its mucosa. In our patient there was no ulceration of the ileum and there was no free gastric hydrochloric acid.

SUMMARY

A case of gastroileostomy due to surgical error is reported. After proper preparation for surgery, this condition was corrected with a complete recovery.

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Superficial Fungus Infections

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In discussing superficial fungus diseases or dermatomycoses as they are called, it is not important to outline a detail study of the mycology involved. But it is necessary to know that the dermatophytes consist of a group of fungi that infect only the epidermis and the epidermal appendages. They never cause systemic diseases. However, like the systemic diseases they are capable of producing sensitivities and causing antigen-antibody reactions.

The following chart lists the important pathogenic dermatophytes.

Trichophyton (Hair-Skin-Nails)

- A. Gypseum Group
 - T. mentagrophytes
- B. Rubrum Group
 - T. rubrum
- C. Crateriform Group
 - T. tonsurans
 - T. sulfureum
- D. Faviform Group
 - T. Schoenleini
 - T. violaceum
- E. Rosaceum Group
 - T. Megnini

Microsporum (Hair-Skin)

- M. Audouini
- M. lanosum
- M. gypseum

Epidermophyton (Skin-Nails)

- E. floccosum

A classification of the dermatophytes on the basis of the fungus involved is impractical from a clinical point of view. The different fungi can produce similar clinical pictures and very often the infection is a mixed one. So a working classification of the dermatomycotic infections is based upon the part of the body affected rather than the fungi involved. Thus we speak of tinea pedis, tinea capitis, and tinea cruris.

TINEA PEDIS

(Athlete's Foot, Ringworm of the Feet)

Tinea pedis is a fungus infection of the feet, invading the toes and the soles of the feet, caused by *Epidermophyton floccosum* and various species of *Trichophyton*.

This eruption is common in adults. About 75% of the adult population is infected.

The clinical picture varies greatly from a simple

erythema and maceration in the toe webbs to an acute edematous, weeping, oozing, fissured dermatitis. The typical chronic forms appear as a recurrent vesicular eruption or thickened keratotic areas. Secondary bacterial infection is often a complication and may result in cellulitis or septicemia. The other most common complication is a development of id lesions at a site distant to the infection. In tinea pedis the id frequently occurs on the hands and may vary from small vesicles to an acute bullous eruption. Here sensitization of the individual to the fungi involved is the important background factor.

TINEA CRURIS

(Eczema Marginatum, Jockey Itch, Dhubie Itch, Ringworm of the Groin, Gym Itch)

Tinea cruris is a fungus infection involving the groin, perineum and perianal region, caused most commonly by *Epidermophyton floccosum* and some species of *Trichophyton*. This is most commonly found in adults. The classic picture is characterized by a well-margined, elevated, papulosquamous eruption with spreading peripheries studded with vesicles. Usually the lesions are bilateral and not symmetrical. As a rule they are dry and scaly but occasionally may present the picture of an acute exuding eruption. Symptoms may vary from none to intense itching.

TINEA AXILLARIS is a fungus infection in the axilla and presents essentially the same picture as tinea cruris.

TINEA CORPORIS

(Ringworm of the Body)

Tinea corporis, caused by various species of Trichophyton and Microsporum, is a fungus infection which involves the glabrous skin and produces lesions which vary from those of simple scaling to deep granuloma. This is one of the most common fungus infections to be found in children of all ages. It is often contracted from household pets. The clinical picture may present a single lesion or there may be many of various sizes. The lesion begins as a tiny red macule which spreads peripherally and clears in the center. This probably explains the origin of the common term "ringworm". The lesions are relatively asymptomatic but may cause slight itching.

TREATMENT

The treatment for tinea pedis, tinea cruris, tinea axillaris, and tinea corporis are essentially the same. They can be discussed as one. Treatment follows the usual basic dermatologic therapeutic approach which varies according to the stage of the eruption.

ACUTE

1. KMNO₄ (1:4,000) soaks and compresses.
2. 1% gentian violet in 10% alcohol b.i.d.
3. Sedation as necessary.
4. Daily debridement.
5. For acute secondary infection the systemic use of penicillin, aureomycin, terramycin, or sulfonamides as indicated.

SUBACUTE

1. KMNO₄ (1:4,000) soaks.
2. 1% gentian violet in 10% alcohol b.i.d.
3. Mild fungistatic and fungicidal ointments as:
 - (a) Fatty acid ointment
 - (b) Pragnatar (Smith, Kline & French Labs.)
4. Daily debridement

CHRONIC TYPES

A. M. Treatment:

1. Castellani's paint
2. Fatty acid or thymol-iodide powders

P. M. Treatment:

1. KMNO₄ (1:4,000) soaks
2. Debridement
3. Castellani's paint
4. Fungistatic and fungicidal ointments as:
 - (a) Fatty acid ointment
 - (b) Pragnatar (Smith, Kline & French Labs.)
 - (c) 5% crude coal tar ointment
 - (d) Half strength Whitfield's ointment (use with care)

TINEA CAPITIS

(Ringworm of the Scalp)

Tinea capitis is a fungus infection of the scalp and hair usually caused by the *Microsporum* group. *Microsporum* infections are most always found in children before puberty. The rare *Trichophyton* infections which involve the hair may also infect adults. The usual infection is caused either by *Microsporum Audouini*, which is derived from human contact, or *Microsporum lanosum* which is derived from animal contact. The recent large epidemics occurring in this country in the last several years have been caused by *Microsporum Audouini*. The most frequent clinical picture is a mild papulosquamous eruption. The hairs in the invaded areas are lusterless, brittle and there is partial or complete alopecia. Symptoms may vary from none to intense itching. The *Audouini* type shows no infectious reactions and is usually asymptomatic. The other types may produce marked inflammatory changes with subsequent symptoms associated with ulceration and scarring (kerion formation).

DIAGNOSIS: It is important that all cases of tinea capitis be cultured for identification of the specific fungi involved. However, for a quick confirmation of a suspected case of *Microsporum* infection fluorescence under a Wood's light (black light)^o can be demonstrated. The organisms may also be demonstrated in the hairs by a microscopic examination in 10 to 20 percent potassium hydroxide.

TREATMENT: When caused by *Microsporum lanosum*, tinea capitis can usually be cured by daily manual epilation of the hairs involved followed by a shampoo and the application of a fungicidal preparation. The *Microsporum audouini* type will sometimes respond to the same routine. The use of a Wood's

^oBlack Light Products, 67 East Lake Street, Chicago 1, Illinois.

light is a valuable adjunct in following treatment. The cost of the Wood's light prohibits its purchase by the average patient. However, the Westinghouse Electric Company makes a purple-X bulb (cost-\$1.25) which produces fluorescence adequate to make it worth while to facilitate daily epilation. In the recent years because of the epidemics in this country much work has been done attempting to perfect a preparation satisfactory for the treatment of tinea capitis. To date no satisfactory preparation has been worked out. However, with the various preparations containing fatty acid and/or salicylanilide in a carbowax base^o, fairly good results have been obtained following the routine of daily epilation, shampoo and ointment. Cure may be effected in three to eight months. In many instances, especially the *audouini* infections, x-ray epilation is necessary and should always be done by an expert familiar with the technic involved. With this method cure may be produced in two to three months.

TINEA UNGUIUM (Ringworm of the Nails)

Tinea unguium is a chronic fungus infection, in-

^oHyanilid (Wright and Lawrence), Salinidol (Doak Co., Inc.), Salicylanilide Ointment (Parke, Davis & Co.) Salundek (Wallace & Tiernan Products, Inc.)

volving the nails of the hands and feet, caused by *Epidermophyton floccosum* and various species of *Trichophyton*. The affected nails are discolored, piled up, friable, and distorted. Usually beneath the nail there is an accumulation of cheesy material. This is the most resistant of all fungus infections and occurs less commonly in children than adults.

TREATMENT: At best treatment is difficult and slow. Surgical evulsion and x-ray therapy in many instances are not satisfactory or worth the difficulty and danger involved. A routine that will yield results if properly followed is:

1. Daily filing and scraping to tissue paper thinness
2. KmNo4 soaks (1:4,000) 30 minutes each day
3. Fatty acid ointment massaged into the nail

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Murine Typhus Fever

ITS INCIDENCE AND CONTROL IN SOUTH CAROLINA^o

By

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The development of our knowledge of diseases transmitted by insects has the appeal of a good story and furnishes a most interesting chapter in our medical history. Typhus Fever being a disease in this category and of increasing public health significance, I feel it is appropriate to review our medical achievement and present knowledge in the control of this disease, with special emphasis on its incidence and control in South Carolina.

Just prior to and during World War II an increasing interest was manifest by all medical men in the Rickettsial diseases. In the southeastern United States, this interest was centered to a large degree on Murine Typhus Fever. Evidence of this interest is readily understood by a study of the public Health reports from this area, which show a surprising and steady increase in the number of cases reported annually. More than five thousand three hundred (5,300) cases were reported to the public health service in 1944 of

which over ninety-eight per cent (98%) were from nine (9) southeastern states. This was the greatest number recorded for any one year but probably represents only a part of the total number of cases occurring because the reporting of actual cases has been far from complete.

At the present time the United States Public Health Service recognizes two distinct types of Typhus Fever; (a) The classical European Typhus, which occurs in epidemic form, is associated with body infestation with infected lice, and has a high mortality rate; (b) Endemic or Murine Typhus, which follows contact with infected fleas, does not appear in epidemic form and has a relatively low mortality rate. This latter group being the only one concerned in this discussion.

Murine Typhus Fever is one of a group of diseases caused by the Rickettsial organisms, so named by da Rocha-Lima in 1916 in honor of the young American bacteriologist, Howard Ricketts, who had probably first observed the small micro-organisms and who later died of Typhus Fever. The Rickettsial organisms

(^oWinning Thesis, Class of 1950, Medical College of the State of South Carolina)

are small micro-organisms which occupy a position somewhere between the bacteria and virus. In man and animals these organisms usually occur within the cells of the endothelial lining of the blood vessels. They have not been cultivated outside of the presence of living cells but remain a puzzling group, having some of the characteristics and attributes of both bacteria and virus.

Endemic Typhus Fever then may be defined as a mild febrile disease of about fourteen (14) days duration but occasionally with prolonged convalescence, caused by *Rickettsia Mooseri* and transmitted by flea bites, by contact with flea feces, or by ingestion of food contaminated by rat urine.

The existence of a modified form of Typhus Fever in the United States was first suggested by Dr. Nathan Brill, who, in 1910, summarized his observations of two hundred and twenty-one (221) cases, the first occurring in 1898, of a disease resembling typhus, but being less severe and having a low mortality. He expressed doubt that he was dealing with true typhus, but in 1912 laboratory evidence furnished by the United States Public Health Service demonstrated that the then called "Brills Disease" and European Typhus were identical, differing only in epidemiological features. It soon became apparent that Endemic Typhus or "Brills Disease" had probably been existent in this country for many years. Long after "Brills Disease" was definitely identified as Endemic Typhus, the mystery of its manner and mode of transmission and its peculiar lack of communicability from man remained to be solved.

The epidemiology of old world typhus was well established when Dr. Brill made his first report, occurring chiefly among the lower strata of society and associated with filth and unsanitary conditions. The body louse being the principle vector of Epidemic Typhus, it ceases to exist when the lice are removed. Murine Typhus on the other hand, is no respecter of social status or personal hygiene. Its occurrence in all seasons of the year but more frequently in summer and fall months had epidemiologists at "bay" for a number of years. Finally it was noted that most cases occurred among people who worked in trades as clerks, proprietors, salesmen and grocers. A large percentage occurred among those handling foodstuff or worked in warehouses where rats were usually abundant. The suspicion was then made that rats might have some part to play and that some ectoparasite of the rat could be the vector.

Brilliant research investigation by personnel of the National Institute Of Health in 1930-31 soon unraveled the transmission mystery. They found the *Rickettsia* of typhus in rats caught in buildings where human cases were occurring and also found it in fleas removed from these rats. In the light of this new knowledge it was readily understood why Old World or European Typhus Fever is epidemic because it is communicated directly from man to man through the intermediary of the body louse, a parasite peculiar to

man. Like-wise it was easy to understand why Murine Typhus is endemic due to the fact that it is not transmitted from man to man but from rat to man by the rat flea, the rat being the perpetual reservoir.

Public Health reports indicate that climatic conditions most favorable for widespread occurrence of Murine Typhus Fever in the United States lie south of thirty-three (33°) north latitude. In contrast to this, south of the thirty-three degree (33°) north latitude line Typhus Fever appears to be contracted about as extensively in residential and rural sections as it is in the business areas of cities and towns.

The peak seasonal incidence varies, but in most places the greatest number of cases are reported during July and August. In an infected establishment every individual in the area may become infected with typhus within a very short time. The majority of cases are reported among adults, males exceeding females by a ratio of at least two to one. However, children are not excluded. This disease is no respecter of persons or positions.

Practically all wild rodents and many other animals have been found susceptible to infection with the *Rickettsiae* of typhus, (*Rickettsia prowazekii* Mooseri) but the domestic rat is the chief reservoir and source of infection so far as man is concerned.

Humans contract the disease from rats or from fleas, but the exact mechanism of the transmission is not entirely clear. It is possible that humans are infected with Typhus *Rickettsiae* through infected feces or rodent ectoparasites. Experiments show that *Rickettsiae* are excreted in feces of lice and fleas.

Rickettsiae in flea feces may retain their virulence for periods of a month or more. Floors, shelves, and exterior surfaces of buildings which harbor typhus infected rats and their parasites may be contaminated by infectious ectoparasite feces dislodged from fur of rats, or deposited by fleas which have become separated from their hosts.

The possibility that persons may become infected through infectious feces, without being bitten by the parasite is very strong.

Extensive efforts have been made to get rid of rats, which are the reservoir of the infection. Rat-proofing of buildings and rat poisonings have been applied with varying degrees of success. Lately the attack has been directed also against the rat flea and other ectoparasites by dusting with DDT powder all reachable rat-runs, burrows and harborages, and areas of passage in which rats might collect DDT on their coats and carry it to their nests.

Field trials of closely controlled DDT dusting operations by the United States Public Health Service in selected areas in southern Georgia has shown disturbed normal ecology of rat ectoparasite populations in a variety of ways. Also a significant reduction in the prevalence of typhus complement-fixing antibodies in the rat population of dusted areas and by so doing may have contributed to the altered epidemiological

picture of Murine Typhus, thereby reducing prevalence of the disease in rats and man. It is still too soon to completely evaluate the results, but these indications support the theory that DDT dusting on county wide basis of rat runs and harborages, with the aid of other rodent or rodent ectoparasite control measures can reduce the incidence of Murine Typhus in the southern states.

Vaccines against Endemic Typhus Fever have been developed which give good protective value in animals but have not been adequately tested in man.

In South Carolina Murine Typhus has had an endemic foci in Charleston and Beaufort for a number of years. During the early 1930's a large percentage of the reported cases came from the city of Charleston alone.

Charleston being a sea-port it has the usual difficulties, in common with all sea-port towns, of rat infestations, due mainly to the large storage warehouses and shipping facilities, which offer both food and harborage as well as transportation of rats in ship cargoes. Likewise, on the land side numerous railroad connections fan out to all points of the state.

In following the spread of typhus inland it is noted that it occurred first along points of direct connections with Charleston, Beaufort and the adjacent cities of Savannah and Augusta, Georgia, both long known as definite foci.

Beginning with the decade of 1930, the state embarked on an extensive road building program. Modern highways have reached many of the out-of-the-way communities or at least made them easily and quickly accessible. Trucks carrying rats, as well as grains and produce, have undoubtedly played a part in carrying typhus to these communities that had not experienced the disease previously.

Annual reports of the South Carolina State Board of Health beginning with the year 1937, reveal a note of considerable concern over the increase in incidence of reported cases of Typhus Fever, which reached one hundred and one (101) cases against fifty-nine (59) cases the previous year. The largest increase occurred in Spartanburg, a center of food distribution through wholesale houses, and it is interesting to note that there is a direct railroad connection with Charleston.

During 1938, Murine Typhus Fever continued to increase in incidence reaching one hundred and forty-six (146) cases.

By 1939, a total of two hundred and thirty-two (232) cases being reported from all sections of the state. During this time control efforts were headed by a full time Sanitary Officer who concentrated his efforts in increasing interest in the control of rats in communities with the highest number of cases.

The 1940-41 morbidity reports show a decline in Endemic Typhus Fever, the first in ten years. These reports indicate that it has spread to all counties of the state but remains almost entirely an urban disease. Therefore, it was considered that their efforts in rat

control programs were beginning to bear fruit but warned that further outbreaks would occur unless more determined efforts were made by city officials in carrying out Rodent Control Programs.

Rules and regulations to prevent the spread of Typhus Fever by requiring certain structures to be rat free and rat-proof were prepared by the State Board of Health for incorporation into city ordinances in order that an effective control campaign could be started in infected areas.

In July, 1942, the significant increase in incidence of Typhus Fever and pressure of the war effort caused the United States Public Health Service to form a Typhus Control Unit, which was in reality the outgrowth of limited typhus control activities started earlier, and used primarily as a field unit for demonstrating rat-proofing methods.

Assistance from this unit was received by the state in the form of assignment of trained personnel to the State Board of Health to aid in organizing projects of rat poisoning and rat-proofing in the infected towns and to assist in their operations until local workers were trained in the work. The projects were financed locally by the beneficiaries of the work and often were subsidized by the communities. The program included: (1) rat-proofing establishments, which was the most extensively used method; (2) inspection of buildings to determine degree of rat infestation; (3) rat poisoning campaigns; and, (4) rat trapping.

On July 1, 1945, typhus control activities of the United States Public Health Service were reorganized and increased federal funds became available for operational control activities. Morbidity statistics for Typhus Fever in South Carolina were considered significant to warrant control activities with federal assistance and an extensive cooperative program of Typhus Control was entered into.

Administrative jurisdiction was placed under the control of the Division of Preventable Disease of the State Board of Health and operations carried on through the local health departments. The various activities were integrated into an over-all program and was characterized by the introduction of DDT dusting as a method of controlling rat ectoparasites. Although it is uncertain as to which ectoparasites are principally responsible for transmitting the Rickettsia organisms to humans, evidence pointed to the oriental rat flea, *Xenopsylla cheopis*, as the most incriminating vector. Therefore, if the vector could be removed, the control of Typhus Fever could easily be obtained. This dusting operation was justified on the basis of experimental observations which showed that good control of rat ectoparasites could be obtained by dusting DDT along places where rats were known to travel. Fortunately, the rat flea has proved to be more susceptible to control by DDT than mites or lice.

In order to evaluate the dusting procedures, live rats were trapped before and after dusting and the degree of infestation with fleas and other ectopara-

sites determined. Prevalence of typhus in rats was also determined by serological complement-fixation test.

This cooperative program of typhus control between the State Board of Health and the United States Public Health Service has been developed along sound technical lines with every indication so far of producing the desired results. With the increase in the use of DDT and greater use of newly developed poisons, greater progress in typhus control may be anticipated. The program is in reality a demonstration to solicit the support of organizations both public and private, as well as the public generally. As this goal is attained through public health education and as local health department personnel gain experience in the application of typhus control methods, it is anticipated that financing will be entirely on a local basis and the United States Public Health Service participation will be limited to epidemiological and technical assistance when requested.

There is no question that in order to continue the program it must be integrated into the overall activities of the local health departments and be supported by an enlightened public. The reason for seeking this broad support lies in the fact that rats are so widely entrenched in the habitats of man that adequate control is impossible without widespread and coordinated effort. If properly carried out it can lead to the prevention of all the rat-borne diseases which have plagued man through the centuries.

CONCLUSIONS

1. Murine Typhus Fever is of increasing Public Health significance.
2. Murine Typhus Fever is still predominately a disease of cities and small towns in South Carolina.
3. The highest incidence of typhus in South Carolina is in the eastern half of the state but cases have been reported from all counties of the state.
4. The cases reported from the western half of the state have been sporadic or minor outbreaks usually traceable to a definite foci. The danger of further

spread is likely due to easy access over improved and fast transportation facilities.

5. Typhus Control measures appear to be reducing the incidence of the disease in South Carolina.
6. The disease in the rat population can be reduced to such a point that it will not constitute a real danger to human beings by typhus control measures employing such procedures as rat poisoning, DDT dusting, rat-proofing and education of the public. Such measures must be carried out on community-wide basis to be effective.

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CANCER

Edited by HENRY W. MAYO, JR., M.D., Charleston, S. C.

BREAST CARCINOMA: A STATISTICAL ANALYSIS

CHARLES B. HANNA, M. D. AND
R. W. POSTLETHWAIT, M. D.
Charleston, S. C.

Whereas the analysis of a relatively small group of cases of carcinoma of the breast cannot be expected to disclose new ideas or principles, it is of value to summarize the local statistics and these may serve as a basis for discussion of various aspects of diagnosis and treatment. With this in mind, a statistical review has been carried out of 220 cases of histologically proven carcinoma of the breast seen at the Cancer Clinic and Roper Hospital during the ten year period 1940-1949.

In this review, Portmann's¹ revised classification has been utilized to group these patients according to stage. It must be emphasized that in the majority of instances selection of the proper stage was based on the recorded descriptions of physical findings, and in some cases the information given was incomplete. According to Cade,² Portmann's classification is the most satisfactory one available and is of value from the standpoint of selection of treatment and prognosis. Clinical signs as well as pathologic findings determine the extent of the tumor and the stage. Because of its importance, Portmann's revised classification is reproduced as follows:

Stage I—Tumor: localized in breast and movable. Skin: not involved. Metastases: none in axillary lymph nodes or elsewhere.

Stage II—Tumor: localized in breast and movable. Skin: not involved. Metastases: few axillary lymph nodes involved, none elsewhere.

Stage III—Tumor: diffusely infiltrating breast, fixation of tumor or breast to chest wall, edema of breast, secondary tumors. Skin: edematous, brawny red induration or inflammation not due to infection, extensive ulceration, multiple secondary nodules. Metastases: many axillary lymph nodes involved or fixed, no clinical or x-ray evidence of remote metastases.

Stage IV—Tumor and skin: as in any other stage. Metastases: axillary and supraclavicular lymph nodes extensively involved, clinical or x-ray evidence of remote metastases.

Using this classification, the 220 cases under discussion were divided: Ninety-seven in Stage I, fifty-six in Stage II, forty-seven in Stage III and twenty in Stage IV. The incidence by age and color is shown in Table I, and by color and stage in Table 2. Only one patient was a man. Four patients were under 30 years of age and thirty-three were over 70 years. The age distribution in this series is generally higher in

the older groups than that in the reports of others, such as Nicolson and Grady,³ Wells⁴ and Haagensen and Stout.⁵ One hundred and nineteen patients were white and 101 colored. Of interest is the fact that 65 percent of the white patients were grouped in Stage I whereas over half of the colored patients were in Stage III or IV. This suggests the effects of economic level, general intelligence and possibly the value of various educational campaigns.

Only 6 per cent gave a history of previous breast disease. Seventy-four per cent had one or more pregnancies; 10.6 per cent had more than seven pregnancies. According to their history, 23.4 per cent were premenopausal at the onset of the malignancy.

A determination of the primary symptomatology in these patients (Table 3) again emphasizes that a painless lump in the breast is by far the most common mode of onset. Usually felt accidentally by the patient, although occasionally noted by a physician during examination for other complaints, the mass may escape detection until it has been present for several months. Certainly greater educational efforts are needed, particularly in the lower economic levels, to inform these patients of the possible cause of a lump in the breast and to instruct them in the simple procedure of monthly breast self-examination.

The frequency of symptoms referable to the nipple as the primary complaint is perhaps disproportional in this series, since there were ten patients who had Paget's disease of the nipple. Pain in the breast and ulceration of the lesion were about equally frequent as first symptoms. A few first noted enlargement of the breast, shrinkage of the breast or discharge from the nipple. Six patients noted first a mass in the axilla.

Subsequent symptoms included breast pain in 22 per cent of the patients. An additional 10.5 per cent noted a mass in the breast and nearly 14 per cent developed ulceration of the skin. Less frequent later symptoms included a mass or masses in the axilla 8.7 per cent, nipple discharge 7.1 percent, tenderness of breast 6 per cent, nipple retraction 4 per cent and weight loss 4.6 per cent. Symptoms of far advanced disease were occasionally recorded; these included a second breast tumor, cough, bone pain, weakness, swelling of the arm and supraclavicular mass.

Of considerable interest, again from the standpoint of cancer education, is an analysis of the duration of symptoms prior to consulting a physician. This is shown in Table 4. About one-third of these patients saw their physicians after having symptoms for three months or less. Another third, however, waited for a period of more than twelve months, during which time they were aware of a breast abnormality, before seek-

ing medical care.

In about 90 per cent of the patients, the first physician consulted advised or carried out either proper or acceptable treatment. Generally speaking, this percentage is excellent and places the major share of culpability for delay on the patients. The remaining patients, however, were less well handled: Two patients had incision and drainage under a mistaken diagnosis of abscess, which is a reasonable error. Nine patients were given an ointment to apply to the breast which could be acceptable for Paget's disease but not for a mass in the breast, which was the case in several instances. Fourteen patients had no treatment and no particular advice offered by the first physician consulted. Two patients refused treatment.

Tabulation of the recorded physical signs in order of frequency is shown in Table 5. It is of considerable interest that, following a mass in the breast, the next four most common physical signs noted were axillary adenopathy, fixation of the mass to the skin, fixation to the deep fascia and ulceration. These are all late signs of breast malignancy and suggest that, in view of the number of Stage I lesions, the early signs were either not looked for or, if found, were not recorded.

The importance of seeking and identifying the early signs of carcinoma of the breast cannot be over-emphasized. Minute changes in the contour of the breast and asymmetry of the breasts should be noted. The lesion, however small, is a dominant mass, usually firm, non-tender and fading into the surrounding normal tissue at its margin. A sensation of decreased mobility without actual fixation should make the examiner suspicious. Decreased elasticity of the nipple should be carefully noted. Shortening of the suspensory ligaments of the breast (Cooper's ligaments) may produce early retraction signs which are practically diagnostic. Slight dimpling of the skin and displacement of the nipple may be accentuated by raising the arms over the head, by contracting the pectoral muscles and by leaning forward so that the breasts hang from the chest wall. These signs may be detectable only on most careful examination in the early lesion. Routine examination of both breasts with methodical and careful investigation of the axillae for lymphadenopathy must be done for complete appraisal of the disease. Notation of the number, size and consistency of all lymph nodes permits more accurate staging and selection of treatment. One cannot wait for obvious signs, such as edema of the skin, nipple retraction or tumorfixation of the deep fascia if appreciable improvement in the cure rate is to be attained.

In the further examination of these patients, an attempt must be made to determine the presence or absence of remote metastases. Routinely, roentgen examination of the chest, spine and pelvis is now carried out. It was found that seventy-nine of the 220 patients in this series had no record of a preoperative x-ray of the chest. In addition to the usual physical and laboratory examinations, the status of cardiac and

renal function is investigated. Deficiency in blood, protein, or vitamins is corrected.

When a lump has been found in the breast, an accurate diagnosis can be made only by removal of a part or all of the mass, followed by histologic study of the excised tissue. For this reason, frozen section studies should be done in the operating room where, if the lump is proven carcinoma, a radical mastectomy may immediately follow. Because of this the patient should be prepared, not only physically but psychologically for the eventuality of radical mastectomy.

Of the 220 cases, eighty-six were seen during the first five years and of these, seventy-five were treated surgically; sixty-five had simple mastectomy and ten radical mastectomy. During the second five year period, 127 were operated on; sixty-two had simple mastectomy and sixty-three radical mastectomy.

Of the seventy-three radical mastectomies, 34 per cent were clinically and histologically found free of axillary metastases. Only one case was believed to have axillary metastases but did not. Histologically proven axillary metastases were found in 20.8 per cent of patients thought to have no axillary lymph nodes. The remaining 43.1 per cent had the clinical impression of axillary metastases proven histologically.

At the present time, all patients seen in the Cancer Clinic with operable carcinoma of the breast are treated by radical mastectomy. The latter procedure includes complete removal of the involved breast with a wide margin of normal skin, of both pectoral muscles and of the axillary contents. Preoperative irradiation is not given; postoperative x-ray therapy is administered if axillary lymph node involvement is demonstrated. The criteria of inoperability as described by Haagensen and Stout are not completely subscribed to. Inflammatory carcinoma and carcinoma developing during pregnancy are at times treated by radical mastectomy. Edema of limited extent and moderate ulceration are not considered contraindications to surgery. Fixation to the deep fascia may be inflammatory and so does not necessarily indicate inoperability. Satellite nodules, extensive edema, multiple tumors, extensive ulceration and large, fixed axillary nodes and remote metastases are indications of inoperability. Simple mastectomy is employed only in far advanced lesions to relieve the patient of an ulcerative mass. In the premenopausal group, castration is believed to be indicated, preferably by surgical means. Irradiation or hormone therapy is used in patients not suitable for operation. Testosterone has been used in the majority of cases requiring hormone treatment.

The number of cases treated by radical mastectomy more than five years ago is too small to be of any significance from the standpoint of follow-up study. Of the sixty-five cases subjected to simple mastectomy, 32.3 per cent lived more than five years, a survival rate which is a little higher than would be expected without treatment. It is anticipated that later groups

of patients will show an appreciably higher rate of survival since radical mastectomy has been adopted for all operable cases and supplemental means of treatment are being utilized.

SUMMARY

During a ten year period ending December, 1949, 220 cases of carcinoma of the breast were seen in this clinic. A statistical analysis of these cases has been carried out. An appreciable percentage, particularly of the colored patients, were in Stage III or IV at the time of admission, thus precluding treatment with reasonable hope of cure. Patient delay appeared to be the responsible factor, suggesting the need for greater efforts in lay education, particularly in the lower economic groups. Emphasis has been given to the early signs of breast malignancy. About a third of the patients treated by operation more than five years ago survived.

AGE AND COLOR

	20-29	30-39	40-49	50-59	60-69	70+
White	1	13	28	27	24	28
Colored	3	15	27	26	23	5
Total	4	28	55	53	47	33
Percentage	1.8	12.7	25.0	24.1	21.4	15.0

Table 1

COLOR AND STAGE

	I		II		III		IV	
	No.	%	No.	%	No.	%	No.	%
White	77	64.7	29	24.4	9	7.6	4	3.3
Colored	20	10.8	27	26.7	38	37.6	16	15.9

Table 2

First symptoms noted in 220 cases of breast carcinoma.

	No.	%
Mass in breast	175	79.5
Pain in breast	9	4.1
Ulceration	8	3.6
Mass in axilla	6	2.8
Erosion of nipple	4	1.8
Itching of nipple	3	1.3
Nipple retraction	3	1.3
Other	6	2.8
Unknown	6	2.8

Table 3

Duration of symptoms prior to seeing a physician

	No.	%
Less than 1 month	30	13.6
1 - 3 months	42	19.1
3 - 6 months	38	17.3
6 - 12 months	30	13.6
12 - 24 months	26	11.8
24 - 36 months	23	10.5
Over 36 months	20	9.1
Unknown	11	5.0

Table 4

PHYSICAL SIGNS

	No.	%
Mass in breast	214	98.1
Axillary adenopathy	65	29.8
Fixation to skin	56	25.7
Fixation to deep fascia	39	17.9
Ulceration	36	16.5
Nipple retraction	30	13.8
Dimpling of skin	26	11.9
Supraclavicular adenopathy	14	6.4
Asymmetry of breasts	11	5.0
Erosion of nipple	10	4.6

Table 5

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PROGRAM
SOUTH CAROLINA MEDICAL ASSOCIATION
OCEAN FOREST HOTEL
MYRTLE BEACH, SOUTH CAROLINA
MAY 15, 16, & 17th

TUESDAY, MAY 15

- 10:30 A. M. House of Delegates
 9:00 P. M. Entertainment

WEDNESDAY, MAY 16th

- 9:30-10:00 A. M. Welcome
 Responses
 10:00 A. M. DR. I. M. HINNANT
 Crile Clinic, Cleveland, Ohio
 Subject: "Drug Therapy in Allergic Disease."
 10:30 A. M. DR. FRANK C. OWENS
 Chairman Committee on Military Procurement for S. C.
 Columbia
 Subject: "The Status of the Doctor Draft Law in S. C."
 11:00 A. M. DR. J. W. JERVEY
 Greenville
 Subject: "Reading Difficulties in Children."
 11:30 A. M. Memorial Service
 11:40 A. M. Presidential Address
 Dr. Wilbur R. Tuten, President
 Fairfax, South Carolina
 12:00 Noon DR. HARRY S. MUSTARD, Guest Speaker
 Director, New York State Charities Aid Association
 Professor of Public Health Practice
 Columbia University, New York
 Subject: "The Changing Picture in Epidemiology."
 1:00-2:30 P. M. Alumni Luncheon
 2:30 P. M. DR. F. E. KREDEL
 Department of Surgery
 Medical College of South Carolina, Charleston
 Subject: "The Sympathetic Nervous System and the General Practitioner."
 3:00 P. M. DR. PAUL W. SANGER
 Charlotte, North Carolina
 Subject: "The Dangers of Symptomless Intrathoracic Lesions."
 3:30 P. M. DR. BEN WYMAN
 South Carolina State Board of Health, Columbia
 Subject: "Rabies and the Doctor."
 4:00 P. M. DR. J. GRAFTON LOVE
 Associate in Section on Neurosurgery
 Mayo Clinic, Rochester, Minnesota
 Subject: "Dumbbell Neurofibromas Involving the Spinal Cord and Nerve Roots (so-called Hourglass Tumors)."
 8:00 P. M. Banquet

THURSDAY, MAY 17th

- 9:30-11:30 A. M. Ob-Gyn Symposium
 DR. LESTER A. WILSON
 Medical College of South Carolina, Charleston
 1. "Hemorrhage During the Third Trimester of Pregnancy"
 DR. HEYWARD H. FOUCHE, Columbia
 Discussants: H. M. ALLISON, M. D., Greenville, S. C.
 2. "Scopolamine in Obstetrics"
 Guest Speaker: H. F. SHARPLEY, Jr., M. D.
 Savannah, Georgia
 3. "Carcinoma of the Cervix Uteri"
 LAWRENCE L. HESTER, Jr., M. D., Charleston, S. C.
 Discussant: G. FRASER WILSON, M. D., Charleston, S. C.
 11:30-12:00 Noon DR. BUFORD S. CHAPPEL, Columbia
 Subject: "A Plastic Operation for Impotency—A Description of a Technique Using Cartilage Transplant."
 12:00 Noon DR. LAWRENCE P. THACKSTON, Orangeburg
 Subject: "Retropubic Prostatectomy"

OUR GUEST SPEAKERS



J. GRAFTON LOVE, M. D.
Rochester, Minn.



PAUL W. SANGER, M. D.
Charlotte, N. C.

CAT.



H. F. SHARPLEY, Jr., M. D.
Savannah, Ga.



HARRY S. MUSTARD, M. D.
New York, N. Y.

CAT.

SOUTH CAROLINA MEDICAL ASSOCIATION

BALANCE SHEET

December 31, 1950

ASSETS

Petty Cash		\$ 10.00
Guaranty Bank and Trust Company		14,616.34
Accounts Receivable		11,058.41
Deposits Receivable		3.00
Investments		
Defense Bonds	\$10 000.00	
Peoples Federal Savings and Loan	5,000.00	15,000.00
		<hr/>
Office Furniture and Fixtures		3,492.09
		<hr/>
Total Assets		<u>\$44,179.84</u>

LIABILITIES

Social Security		25.24
Withholding Taxes		462.30
		<hr/>
Total Liabilities		\$ 487.54

SURPLUS

Balance		39,413.09
Excess of Revenue over Expenses		4,279.21
		<hr/>
Total Surplus		43,692.30
		<hr/>
Total Liabilities and Surplus		<u>\$44,179.84</u>

We have examined the treasurer's records of the South Carolina Medical Association for the year ending December 31, 1950, and, .

We certify, that in our opinion, the above Balance Sheet and accompanying Statement of Revenue and Expenses, sets forth the financial condition of the South Carolina Medical Association as at December 31, 1950, and the results of its income and expenses for the year ended at that date.

Respectfully submitted,

JAILLETTE AND BRUNSON
Public Accountants

Florence, South Carolina
February 2, 1951

SOUTH CAROLINA MEDICAL ASSOCIATION
STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS

January 1, 1950 to December 31, 1950

Balance per Bank, January 1, 1950:

Guaranty Bank and Trust Company \$10,777.78

Revenue Receipts:

A. M. A. Dues	\$22,410.00	
Membership Dues	17,214.00	
Subscription Dues	3,102.00	
Advertising	11,496.67	
Interest Earned	250.00	
Exhibits	2,808.00	
Directory of Members	55.50	
Miscellaneous Income	602.73	57,938.90

Total

\$68,716.68

Less: Expenses

Audit and Legal	124.50	
A. M. A. Conventions	1,236.74	
S. C. Convention	1,878.58	
Dues and Subscriptions	90.00	
National Conference	89.50	
Heat, Lights, and Water	134.51	
Insurance	67.35	
Misc. Expenses	179.73	
Office Supplies	681.29	
Printing Journal	5,936.44	
Rent	606.00	
Salary—Editor	2,100.00	
Salary—Director of Public Relations	6,700.00	
Salary—Business Manager	1,200.00	
Salary—Stenographic	2,475.00	
Postage	424.90	
Taxes	149.07	
Telephone and Telegraph	630.51	
Travel	140.55	
Bank Charges	5.90	
Expenses—Public Relations	2,430.94	
Rosters of Members	423.02	
Stenographic Help	1,655.00	
Historical Committee	3.80	
Committee on Military Service	56.06	
Freight and Drayage	6.49	
Maternal Welfare Committee	29.28	
A. M. A. Dues	22,260.00	
Woman's Auxiliary	851.13	
N. B. Heyward	1,093.40	

Total Expenses

53,659.69

Balance Carried Forward

\$15,056.99

Withholding Taxes

Social Security—12-31-50	25.24	
Withholding Taxes—12-31-50	462.30	

487.54

Less: Social Security—12-1-50

19.51

Withholding Taxes—12-1-50

314.10

333.61

153.93

Furniture and Fixtures

\$15,210.92

594.58

Balance per Guaranty Bank & Trust Co., 12-31-50

\$14,616.34

TEN POINT PROGRAM OF THE SOUTH CAROLINA MEDICAL ASSOCIATION

1. Cooperation

To promote closer cooperation and better understanding between all agencies, groups and individuals concerned with providing and improving medical care for the people of South Carolina.

2. Extension of Medical Care

To study constantly the need and availability of medical care in each county of the State and in the State at large.

To promote plans for providing or improving medical care where is a need, particularly in the rural areas.

3. Pre-Paid Hospital and Medical Care

To make voluntary pre-paid hospital and sickness insurance available to all the people of the State (through Blue Cross, Blue Shield, and commercial insurance policies), and to promote the widespread purchase of such insurance.

4. Care of Indigent

To work with local county and state agencies, and with philanthropic organizations, toward securing good medical care for the indigent.

5. Public Health

To support the South Carolina State Board of Health in its broad program of preventing diseases and of safeguarding the health of our people.

6. Health Councils

To support the State Health Council in its announced program. To sponsor

the formation of a County Health Council in every county of the state, and to encourage our members to support and to work with these organizations.

7. Hospitals

To promote the expansion of present hospital facilities and the building of new hospitals—where there is a definite need.

To strive for highest standards of professional care in the hospitals in the State.

8. Medical Colleges

To support the Medical College of the State of South Carolina and to bend our efforts toward keeping its standards of education on a par with other medical colleges throughout the country.

To promote good nursing education and good nursing care throughout the State.

9. Education of the Public

To acquaint the citizens of the State with regard to the problems of medical care in existence today, to inform them as to what is being done to solve these problems, and to advise with them as to further plans for securing better health and better medical care for the people of South Carolina.

10. Political Medicine

To prevent political control or domination of medical practice or of medical education.

The Journal of the South Carolina Medical Association

EDITOR: Julian P. Price

Florence, S. C.

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8 $\frac{1}{2}$ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

Office of Publication: (In care of the Editor)

Florence, S. C.

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 APRIL, 1951

ANNUAL MEETING

The annual meeting of the S. C. Medical Association will be held at Myrtle Beach May 15 to 17. The House of Delegates will meet on the 15th, and the scientific sessions will be held the following two days.

Elsewhere in this issue is to be found the program for the meeting. The Scientific Committee is to be congratulated for its work.

Complete programs, with full details, will be printed at a later date and will be available to all the members. In the meantime it would behoove those who intend to go to make their reservations with the Manager of the Ocean Forest Hotel.

ATLANTIC CITY MEETING

The annual meeting of the American Medical Association will be held in Atlantic City, June 11-15.

It is our belief that every practicing physician owes it to himself and to his patients to attend at least one annual meeting of the A. M. A. It is not only exhilarating from the scientific standpoint but it gives one the opportunity to get a panorama of medical affairs on the national scale and to mingle with physicians from every part of our country.

There are few cities in the United States which can hold this annual meeting with its ten thousand or

more physicians in attendance and Atlantic City is the city nearest to our own state. We would urge as many of our members as possible to attend this year.

Our two delegates will be glad to take any who attend into the meetings of the A. M. A. House of Delegates and to show them the modus operandi of the Association. They will be located at the Hotel Traymore, where the sessions of the House of Delegates are to be held, and may be reached easily by telephone.

CANCER

For the past year we have been devoting a special section of this Journal to cancer. Articles have been written by different members of the faculty of the Medical College under the general supervision of Dr. R. W. Postlethwait, Director of the Cancer Clinic at the Medical College. To Dr. Postlethwait we want to express our sincere thanks for a task well done. We also wish him well as he departs for West Virginia to enter into private practice.

We are glad to announce that Dr. Henry W. Mayo, Jr., has been appointed Acting Clinical Director and has agreed to take over the editing of the Cancer section. We feel that these articles have been of considerable value and that we are fortunate in having the series continued.

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

INDUSTRIAL COMMISSION FEE SCHEDULE

In December, 1950, the South Carolina Industrial Commission released a suggested schedule of fees for professional services in cases before the Commission. The schedule was published after, and as a result of conferences of the Chairman of the Commission, Mr. James J. Reid, with a committee from the South Carolina Medical Association. Subsequently, copies of the printed schedule were mailed from the office in Florence to every member of the Association.

The following account of the progress in the matter and the developments in the course of adoption of the schedule, was prepared by Dr. Frank C. Owens of Columbia, chairman of the committee:

"This committee had several meetings and after considerable discussion made its recommendations before the House of Delegates at the annual meeting of the South Carolina Medical Association at Myrtle Beach in 1949. It recommended the New York fee schedule with modifications and stated:

"It was felt that the medical fee schedule could be accepted almost in its entirety without modification, but that the surgical charges, in view of the prevailing lower rate in South Carolina should be reduced throughout the schedule by 25 per cent. This seemed to be appropriate in all the departments of surgery including the various specialties. It was felt, however, that it would be better to make separate charges for after-care as is being done now on our state form 14."

"These recommendations were approved at the 1949 South Carolina Medical Association Convention.

"Subsequent to that meeting, Dr. White left the country for work elsewhere. Dr. Frank Owens was asked to serve as Chairman of the committee. Dr. Augusta Willis moved away from Orangeburg. Dr. William Judy of Greenville and Dr. Charlie Wyatt of Greenville were appointed on the committee.

"During the latter part of 1949 and the early part of 1950 a number of conferences were held by this committee. Conferences were also held with representatives of the Industrial Commission. The Legislature appointed a Joint Committee to investigate the operation of the Industrial Commission. Several hearings were held and representatives from your committee appeared before that group. There was some feeling and tendency in the Legislature toward approval of the North Carolina fee schedule as a proper one for South Carolina.

"The Industrial Commission of every state in the Union was written and it was requested that a copy of their fee schedules be furnished your committee.

All of those having fee schedules responded. These were studied and compared. It was felt by the committee that rules and regulations of the New York Industrial Commission were probably necessary and advisable for the medical profession in New York State but would not be satisfactory to South Carolina. It was felt that the matter of securing clearance from the Industrial Commission before being authorized to treat any compensation case except an emergency might lead to discrimination. The question of different amounts paid to different doctors for the same work was another angle that might lead to dissatisfaction.

"After studying the various schedules, it was brought out that the Veterans Administration schedule had been accepted by members of the medical profession for some time and had apparently been working satisfactorily. It was therefore agreed and decided by the committee to recommend to the South Carolina Medical Association that they accept as a suggested fee schedule for the South Carolina Industrial Commission cases, the same schedule as was in operation for the Veterans Administration. With this in view, we appeared before the House of Delegates at the 1950 May meeting of the Association and made the following recommendation:

"That the South Carolina Medical Association adopt as a suggested fee schedule for services in cases within the jurisdiction of the South Carolina Industrial Commission, the fee schedule for medical services for the Veterans Administration set forth in VA catalog #5, issued February 15, 1948."

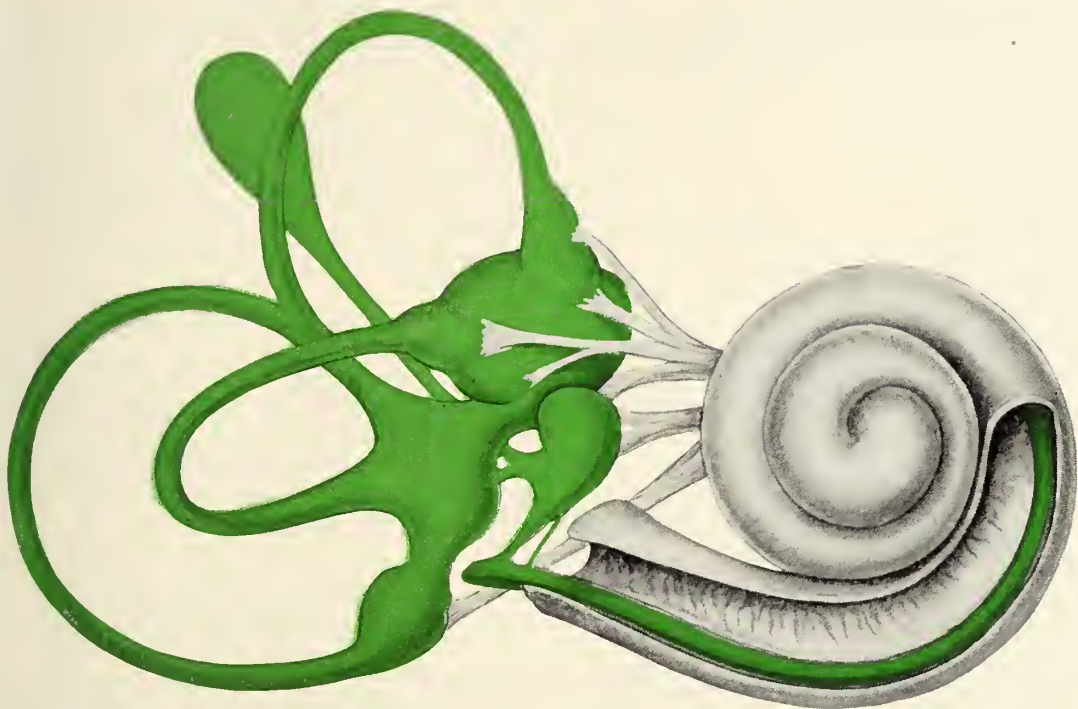
"This recommendation was approved by Council and by the House of Delegates. Mimeographed copies of the recommendation with comments were distributed at the meeting and were available to all of those attending the Convention of the South Carolina Medical Association at Myrtle Beach in 1950.

"The South Carolina Industrial Commission last revised a fee schedule in 1936, and has been operating under that schedule ever since.

"The adoption of the schedule in 1950 was with the idea that it be a suggested fee schedule. Copies of it would be sent to the medical profession of the state and it was to be put in operation and any inequalities that might be noted could be brought to the attention of the committee and of the Industrial Commission with the view to having them corrected.

"In the foreword of the fee schedule pamphlet the Industrial Commission makes the following comment:

"All interested parties are requested to observe



Detail of the Labyrinthine Structure

"The prophylactic value of Dramamine was conclusively demonstrated among 170 passengers who volunteered the information that they were unusually susceptible to motion sickness. . . . There was complete relief (freedom from any signs or symptoms of airsickness) in 152 cases or 89.5 per cent; . . ."

—Tuttle, A. D.: *Special Breakdown of Case Histories*, presented at the Airlines Medical Directors Association Meeting, New York, N. Y., Aug. 28, 1949.

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For the prevention or treatment of motion sickness caused by automobiles, streetcars, ships, planes, trains and other vehicles.

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RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

carefully the functioning of this schedule of medical fees, noting limitations, errors and any provision which may be unreasonable or impractical and file with the Industrial Commission any observations and suggestions.' The Secretary of the South Carolina Medical Association advised the South Carolina Industrial Commission of this action.

"The medical fee schedule committee feels that the one submitted is a good working model. It is not perfect. No doubt some changes should be made and in operation other changes necessary will be brought out. The committee would be very happy to receive any constructive suggestions as to how this schedule can be improved. They would appreciate having these suggestions turned in to them in time for study before the meeting of the South Carolina Medical Association at Myrtle Beach in May, 1951."

BLUE SHIELD COMPLETES YEAR

As the South Carolina Medical Care (Blue Shield) Plan reaches the first anniversary of the beginning of its operation, it is interesting to note the progress that has been made.

According to the report of the Executive Director, Mr. Allen D. Howland, who serves also in the same capacity for the South Carolina Hospital Service (Blue Cross) Plan, to the Board of Directors on March 18th, the record of operation during the first eleven months is very favorable.

Beginning with the writing of contracts effective April 1, 1950, as of February 1, 1951, Blue Shield in South Carolina had paid 804 claims to physicians, amounting to a total of \$34,915.00. This is more than three times the amount of the capital investment advanced to Blue Shield by the South Carolina Medical Association, and the money it should be remembered, went directly to the physicians performing the services, and not indirectly via the hands of their patients.

In addition to the amount paid in claims, as stated above, the Plan has accumulated, and had on hand as of March 1, 1951, a reserve of \$32,079.00. It should be pointed out of course that the record of the first year's operation is not expected to be continued at that high level. Were it so, it would not be in order for the premiums to be maintained at the present rate, but all contracts were issued with a ten-month waiting period in obstetrical cases, and claims arising from this source, therefore, have just begun to be eligible for payment. They are expected to increase rapidly in number within the next few months as additional subscribers who have held their contracts the required length of time become eligible for benefits on this account.

There were at the end of February a total of 6,883 contracts in effect, covering 18,665 individuals.

To us, the most heartening thing about the entire picture is the fact at the end of February *the number*

of participating physicians had increased to a total of 816—more than three-fourths of the total dues-paying membership of the South Carolina Medical Association. That is overwhelming evidence of the recognition and acceptance by the members of the Association of the principle and purpose of Blue Shield, and of their sincere desire to cooperate in this effort to demonstrate to the people of South Carolina the genuine intention of the profession to make a material contribution toward the solution of whatever problem may exist with respect to the payment for professional services for medical care.

On the basis of the record thus far, everyone who has taken an active part in the initiation and organization of the Blue Shield Plan and who has signed a contract of participation or espoused the cause in any way, has ample reason to feel justified for whatever small sacrifice may have been made by way of the expenditure of effort or agreement to accept a fixed schedule of fees.

THE GROWTH OF VOLUNTARY HEALTH INSURANCE

Dr. Elmer L. Henderson, President of the American Medical Association, points out that a new milestone in prepaid medical care has been marked through the rapid growth of voluntary health insurance. Addressing a dinner meeting of United Medical Service, New York's Blue Shield Plan on January 25, 1951 in New York City, Dr. Henderson reviewed the growth and development of the principle of prepaid medical care and the progress and the contribution which has been made through this medium toward the solution of the problem of furnishing adequate medical care to all people.

United Medical Service had recently enrolled its two-millionth member in the Metropolitan area of New York. Organized in 1944, it is at the present time second largest of the country's Blue Shield plans. Michigan took the lead a short time ago.

The review which Dr. Henderson included in his address, of the number, extent of enrollment, and other data with respect to the Blue Shield Plans, should be of interest to the medical profession everywhere. It deserves the especial attention of doctors of South Carolina, as their Blue Shield organization, the South Carolina Medical Care Plan, completes the first year of its existence on April 1st.

According to Dr. Henderson, "the nation's Blue Shield plans alone gained five million new members during 1950, for a new record year of growth. The increase last year exceeded the previous high gain in 1949 by almost two million.

"The Blue Shield plans are enrolling new members at the rate of 28,000 every working day, and they now protect more than seventeen million persons, or approximately twelve per cent of the population.



Rx When Lactation Fails **LACTOGEN[®]**

When the supply of breast milk is inadequate or when lactation fails entirely, there is no better formula than Lactogen. Designed to resemble mother's milk, it consists of whole cow's milk modified with milk fat and milk sugar. It differs, however, in one important respect: the protein content of Lactogen in normal dilution is one-third greater than that of mother's milk—2.0% instead of 1.5%.

A Complete Infant Formula In One Package

Lactogen contains all the ingredients of a well-balanced infant formula. In addition, it is fortified with iron to compensate for the deficiency of this mineral in milk.

Easily Prepared . . . Merely Add Water

Lactogen is simple to use. The prescribed amount is stirred into warm, previously boiled water. Either a single feeding can be prepared, or the entire day's quantity can be made up and stored in the refrigerator until used.

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NOTABLY HIGH IN PROTEIN CONTENT

Lactogen contains a generous amount of protein . . . more than enough to satisfy every protein need of the rapidly growing infant.

Other non-profit medical care plans, which are not yet in the Blue Shield group, cover an additional two and one-quarter million people, making a total of nearly twenty million in just the physician-sponsored plans alone.

There are now seventy-two Blue Shield plans in forty-one States, and participating in their operations are 113,000 out of the 150,000 physicians who are in active, private practice. Last year the Blue Shield plans paid out 150 million dollars for surgical and medical services rendered to member patients.

The Blue Cross hospital plans added more than three million new members in 1950, and they now are beyond the forty million mark in total enrollment.

Out of every dollar paid in premiums, the Blue Shield plans now are paying out eighty-two cents in benefits, and the Blue Cross plans are paying out close to eighty-eight cents in benefits.

The facts and figures I have been citing relate mainly to the Blue Cross and Blue Shield plans. The same kind of progress was being made during 1950 by the insurance companies and the various other agencies in the health insurance field, but complete, final figures from all those sources will not be available for several months.

At the end of 1949, we know from the last annual report of the Health Insurance Council, more than sixty-six million Americans had some kind of voluntary insurance protecting them against hospital, surgical or medical expenses. It is a conservative estimate, based on all known developments in 1950, that between seventy and seventy-two million Americans now have some form of Voluntary Health Insurance.

The Voluntary Health Insurance Plans not only are growing rapidly, but they also are developing new and improved types of coverage, based on sound actuarial standards. As a result of the so-called catastrophic coverage pioneered early last year by the California Physicians Service, fifteen of the Blue Shield plans now are preparing to offer protection against the prolonged costly illnesses such as heart disease, cancer and others. A number of insurance companies also are experimenting with this type of coverage, or are planning to introduce it in the near future.

Marked progress also is being made in making individual coverage more widely available for persons who cannot get group health insurance. Practically all of the Blue Shield plans, and many of the insurance companies, now offer individual enrollments. Maximum progress in this direction is one of the vital objectives of the medical profession.

Another problem which is receiving serious intensive study, and which ultimately must and will be solved, is how to extend Voluntary Health Insurance protection to older persons who are beyond the retirement age.

The remarkable growth and development of Voluntary Health Insurance — which has taken place mainly in just the past ten years, and which still is gaining momentum—is proving that voluntary methods can take the economic shock out of illness, and that dangerous Government intrusion in the field of medical care is completely unnecessary.

The prediction of medical economists—that ninety million Americans will be protected by Voluntary Health Insurance within the next two or three years—is well on its way to fulfillment . . . and the advocates of socialized medicine are fast losing all semblance of a case.”

Dr. Henderson took occasion to refer also to other steps which are being taken by the medical profession toward the solution of the problems of medical care. Not long ago we called attention to the creation of the Medical Education Foundation by the A. M. A. as another demonstration of the manner in which the medical profession is showing its ability to lead the way in voluntary fulfillment of the need, as has been done in the insurance field, without the aid of government subsidy. The same idea was expressed by Dr. Henderson in his address:

Voluntary methods also are demonstrating their worth and vitality in the solution of other problems involving the supply and distribution of medical service. Throughout the nation, many State and County Medical Societies are conducting highly successful programs for placing doctors in communities which need them, for providing medical facilities where needed, for supplying 24-hour emergency medical service, for settling the complaints of patients, for informing the public on matters pertaining to health and medical care, and for insuring adequate medical service for all who need it.

Such programs are proving that effective action can result from close cooperation among doctors, medical schools, public officials, and the people of the community. The American Medical Association is urging and promoting the fullest possible development of such programs in every State, County and locality in the country. This is just one more part of the American answer to those who would socialize medicine first, and the rest of the nation soon after.

There is still another area in which we must prove conclusively that American, voluntary methods can do the job. This is the problem of financial aid to medical education—a matter which has been aggravated and given added prominence by the present national emergency, and also by a great deal of distorted, inaccurate propaganda.

The Board of Trustees of the American Medical Association, at the December clinical session in Cleveland, took the lead by appropriating half a million dollars as the nucleus of a fund to be raised for the aid of medical schools throughout the nation.

The Board expressed the hope that its action will stimulate other professions, industries, businesses, labor groups and private donors to help swell the fund for medical education—and it urged all American doctors to contribute individually, and to take the lead in obtaining contributions from other sources.”

Dr. Henderson pointed out that contributions to the Medical Education Foundation can be addressed to 535 North Dearborn Street, Chicago 10, Illinois.

1951 OBJECTIVES FOR MEDICINE*

Clem Whitaker, Director of the National Education campaign, summing up medicine's past accomplishments for doctors attending A. M. A.'s Cleveland session, warned them against complacency and then deftly outlined 1951 objectives on the “must list.”

He said, “American medicine is in the strongest public position it ever has held because the people have been given the facts on this issue (socialized medicine) and have spoken out sharply against the abridgement of individual freedom in our country.” There certainly is some element of truth in that statement and in the declaration that there still remain some “undone jobs and unsolved problems” for 1951.

Some of the bitterest attacks on medicine have been made by labor and Whitaker listed highest on next year's list for accomplishment the conversion to our way of thinking of as many of these groups as possible and the enlistment in our ranks of those labor groups who feel as we do. This is a job for every individual doctor and every medical society. Recent events indicate this is not as hopeless as it first appears. Unions are beginning to realize regimented labor would follow state medicine.

Also, Wage Earner Forum's recent survey showed 45.8 per cent of those contacted against compulsory health insurance, 26.9 per cent for it and 27.3 per cent “don't know enough about it” to make a choice. The latter group is a fertile field for both the government socializers and medicine. It's a question of who gets there first with the most convincing arguments.

*Reprinted from the February, 1951 issue of Northwest Medicine.

Other groups with whom we have unfinished business, Whitaker said, “are P.T.A., the League of Women Voters, the American Association of University Women and the Nurses Associations.”

(Women's Auxiliary please take notice, that statement is a direct challenge to you. What are you going to do about it?)

Of equal interest to the physicians is that Britain is proceeding with the socialization of legal practice and rumors say the thought is spreading here. Whitaker summed up this situation with the statement: “Doctors should make it their business to enlist their lawyer friends in the work of acquainting the people with the threat of a regimented society which hangs over them.” Farmers, too, should be educated to the fact that socialized farming is not good for the ranchers nor the consumers of their products.

Whitaker enumerated as new year objectives for the doctors, “better physician-patient relationship” with emphasis on “elimination of overcharges, office inefficiency and discourtesy.” “And if you, the doctors, want to remain free ° ° ° you must be alert, aggressive citizens, ready to defend what America has given us,” he said.

Not only increased enrollment in voluntary medical and hospital plans must be accomplished, but “we need improved types of coverage ° ° ° greater protection against prolonged catastrophic illnesses, more complete coverage of the regular costs of even ordinary illnesses,” Whitaker continued. “It has long been apparent that plans which offer only group coverage will not satisfy public demand ° ° ° that the growing demand for individual enrollment plans must be met.”

Clem Whitaker isn't just an individual making noise in the darkness. His list of new year resolutions for the medical profession isn't just guess work or a long shot either. This “must program” is a result of long and anxious study of the problems that have vexed the medical profession for several years. These suggestions, if you please, have the full support of the highest leaders of organized medicine, or Whitaker wouldn't have dared make them publicly.

They, therefore, carry great weight and should be convincing to the rank and file of the medical profession.



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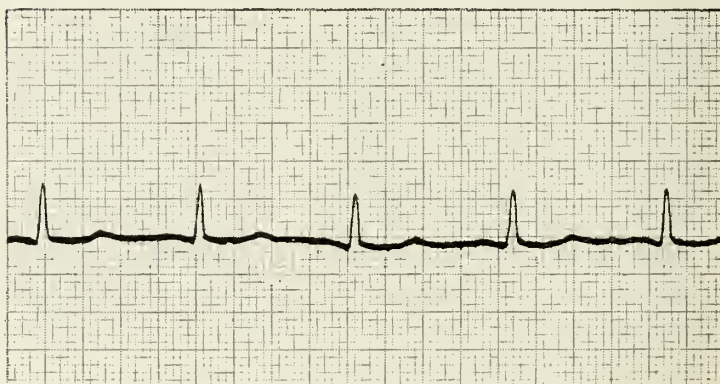
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*a significant advance in the
treatment of ventricular arrhythmias*

Oral PRONESTYL
in ventricular premature contractions



Lead I. Control tracing, ventricular premature contraction.



Lead I. Tracing one week later; patient maintained on 2 Gm. Pronestyl per day. Normal sinus rhythm.

....PRONESTYL *Hydrochloride*

less toxic than quinidine

Indications and Dosage

IN CONSCIOUS *For the treatment of ventricular tachycardia:*

PATIENTS *Orally:* 1 Gm. (4 capsules) followed by 0.5-1.0 Gm. (2 to 4 capsules) every four to six hours as indicated.

Intravenously: 200-1000 mg. (2 to 10 cc.). *Caution*—administer no more than 200 mg. (2 cc.) per minute.

Hypotension may occur during intravenous use in conscious patients. As a precautionary measure, administer at a rate no greater than 200 mg. (2 cc.) per minute to a total of no more than 1 Gm. Electrocardiographic tracings should be made during injection so that injection may be discontinued when tachycardia is interrupted. Blood pressure recordings should be made frequently during injection. *If marked hypotension occurs, rate of injection should be slowed or stopped.*

For the treatment of runs of ventricular extrasystoles:

Orally: 0.5 Gm. (2 capsules) every four to six hours as indicated.

IN ANESTHESIA *During anesthesia, to correct ventricular arrhythmias:*

Intravenously: 100-500 mg. (1 to 5 cc.). *Caution*—administer no more than 200 mg. (2 cc.) per minute.

Supply

Pronestyl Hydrochloride Capsules, 0.25 Gm., bottles of 100 and 1000.
Pronestyl Hydrochloride Solution, 100 mg. per cc., 10 cc. vials.

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DEATHS

LAWRENCE RANDOLPH KIRKPATRICK

Dr. Lawrence Randolph Kirkpatrick, 72, died suddenly while vacationing in Beaufort, on February 24.

A native of North Carolina Dr. Kirkpatrick had practiced medicine in South Carolina since he received his discharge from the army at the end of World War I. He served as a Major with the medical corps and was division surgeon of the 15th Calvary Division. Upon his discharge from the army he returned to Bennettsville and private practice. Later he moved to Belton and then to Ware Shoals where he had practiced for the past nine years.

Dr. Kirkpatrick is survived by his widow, Mrs. Ruth Dantzler Kirkpatrick, one son and one daughter.

FRANKLIN CARVER LEDBETTER

Dr. Franklin Carver Ledbetter, 61, physician of Greenville for the past thirty-three years, died at his home on March 3. He had been in declining health for several years and seriously ill for the past three months.

Dr. Ledbetter was a graduate of Wofford College and received his medical degree from the Atlanta School of Medicine in 1914. Except for two years spent in Williamston, he had practiced in Greenville since 1917.

Dr. Ledbetter is survived by his widow, the former Miss Sidnev Gault, four sisters and one brother.

DAVID ANDREW BIGGER

Dr. David A. Bigger, 59, died unexpectedly at his home in Rock Hill on February 20.

Dr. Bigger was a native of York County, a son of the late Dr. I. A. Bigger. He received his education at Davidson College, the University of North Carolina and was graduated from Jefferson Medical College of Philadelphia in 1917. He served as medical officer with the 20th Engineers during World War I and began the practice of medicine in Rock Hill in 1919.

Surviving Dr. Bigger is his widow, the former Miss Hazel Motte of San Francisco.

NEWS ITEMS

Dr. William N. Cochran has announced the association of Dr. Richard S. Pollitzer in the practice of internal medicine at Spartanburg.

Dr. Sam A. Heaton has opened offices at Newberry for the general practice of medicine.

Dr. Charles McCord Smythe of Charleston and New York has been awarded a fellowship for heart disease research.

PHYSICIANS' ART SHOW AT AMERICAN MEDICAL ASSOCIATION MEETING ATLANTIC CITY

The American Physicians Art Association will have an art exhibit, as usual, during the A. M. A. convention at Atlantic City, N. J. June 11 to 15, 1951, inclusive. Any physician in the United States, Canada and Hawaii desiring to participate in this show should communicate with the secretary for particulars.

J. Henry Helser & Co., Inc., Investment Managers with offices on the Pacific Coast, are the new sponsors of the American Physicians Art Association and will award 200 trophies besides a special Helser Trophy—a large decorative cup depicting Yankee Ingenuity. This cup is to be awarded for art work done in any medium. Also the large Popularity Trophy will be awarded to the owner of the art piece receiving the most popular votes during the A. M. A. convention. Over 4000 members of the American Physicians Art Association will receive shortly, entry blanks, shipping labels and rules about this fourteenth art exhibition.

The Annual Art Banquet will be held Tuesday evening, June 12 at the Marlborough-Blenheim Hotel, Atlantic City, N. J.

F. H. Redewill, M. D., Sect'y
American Physicians Art Association
760 Market Street
San Francisco 2, California

CORRESPONDENCE

Dr. W. R. Tuten
President, S. C. Medical Society
Fairfax, South Carolina

Dear Dr. Tuten:

We take considerable pleasure in informing you of a series of six Seminars to be held early in May in as many cities of our state. The subject of these Seminars will be Counseling Problem Drinkers. These Seminars are being sponsored by our organization and the Ministerial Associations in the various communities.

The Seminars are to be held as follows:

Anderson, April 30	Greenville, May 8
Greenwood, May 1	Charleston, May 14
Columbia, May 7	Florence, May 15

Mr. Dicks is now a Professor of Pastoral Care and Counseling at Duke University, in which capacity he directs a counseling program in the Duke Hospital. He has had wide experience both as a counselor and as a lecturer and teacher on counseling to various professional groups. We consider it a very fine opportunity for doctors, social workers, and other professional persons as well as ministers to have the opportunities of these meetings.

We will appreciate your including this information in any appropriate way to those associated with you in your work.

Very sincerely yours,
Howard G. McClain

rapid and
prolonged antacid action
in hyperacidity and peptic ulcer



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Brand of Dihydroxy Aluminum Aminoacetate
U. S. Patent 2,480,743

Alglyn, in convenient tablet form, exhibits the desirable qualities of rapid and lasting action. In ten minutes the pH is raised to approximately 3.9 and remains above 3.0 for two hours. The acceptability of Alglyn is further enhanced by:

- high acid buffer capacity
- no acid rebound
- no alkalosis
- maximum pH of 4.5 even when given in excess
- small, pleasant-tasting tablets
- low aluminum content
(40% less than dried aluminum hydroxide)
- rapid disintegration

Formulation:

Each tablet contains 0.5 gram (7.7 grains) Dihydroxy Aluminum Aminoacetate, made by the chemical combination of Glycine, one of the amino acids, with Aluminum.

Dosage:

1 to 2 tablets after meals and upon retiring, or as prescribed by the physician.

Supplied:

0.5 gram tablets in bottles of 50 and 100.

References:

1. Hammerlund, E. Roy, and Rising, L. Wait, A Comparative Study of the Buffering Capacities of Various Commercially Available Gastric Antacids, J.A.Ph.A., Scientific Edition, 38: 586-588 (1949).
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Please send me an introductory sample of Alglyn

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ADDRESS

WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. A. F. Burnside, Columbia, S. C.

Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.

PUBLIC RELATIONS

As we know the theme for all Medical Auxiliaries is PUBLIC SERVICE THROUGH HEALTH EDUCATION; so, we must be ever on the alert to continue our past paths and also to extend to new ones. We must realize we cannot be content to let the public receive health information through lay organizations. The problems of today are not just medical problems but economic as well and demand the utmost of our energy and understanding.

To reach the public each county, as well as the state, should have a speakers bureau including physicians, qualified non-medical speakers, and also those among the auxiliaries who are capable of speaking well in public. It must be remembered, however, that whatever we do from the Auxiliaries from the speaking standpoint should be done as representative of our doctor husbands, and all material approved by the Advisory Council. The doctor's wife, whether she wishes it or not, indirectly represents the profession in the public eye and here is the task of crystallizing public opinion. Favorable action from a responsible organization can be obtained only by getting the unassailable facts, regarding Health and Legislation, to that organization. It takes good judgment, careful planning, organizing, literature distribution (which can be obtained from the Nation Education Campaign, American Medical Association, 1 North La Salle Bldg., Chicago 2, Illinois), contact work, often an excellent, brief talk before the voting membership. The important thing is to get the facts to the people who want them. These citizens are growing in numbers in every community of the nation. Don't hesitate to ask for a hearing. Let the various women's organizations in your area know you are ready to provide speakers for them. Almost every organization is eager to hear the story of American Medicine and will welcome a competent, well prepared speaker. The procedure for a speakers bureau would be to (1) Prepare a schedule and assign someone to the responsibility of seeing that your speakers are on the spot, on time, to fill their engagements. (2) Have a statement ready in advance, quoting your speaker's talk briefly, for release in the local newspapers in the issue immediately following the program. (3) Provide the speaker with pamphlets for distribution to the audience after the talk. (4) When you get an endorsement, that is the newsworthy item which should be covered in the first paragraph of your story—and the spokesman for the endorsing organization should be quoted.

We believe that the availability of health service is a necessity and not a luxury. As South Carolina has a large rural population, we need to think in terms of population of our counties as well as cities. The improvement of roads enables one doctor to cover the same territory that several men covered twenty-five years ago. However, he must be given consideration; so the public should be reminded of this and the auxiliaries can help a great deal by helping the doctor in his preventative medicine by informing the people of their needs for better health. School health councils would be a splendid way to contact the parents as well as the children. Work this through your Medical Society.

A doctor said, regarding the work of the Medical Auxiliary: "The infiltration of Auxiliary members into the leadership of other organizations is a source of constant and increasing amazement and gratification to the men. Whenever a contact with a lay group is needed, there is a doctor's wife to open the way. They seem to be there for the express purpose of making things easier for the Medical Societies. They have already been responsible for entries into the State Federation of Women's Clubs, the D. A. R., many P. T. A.'s and many other large and important groups. In each case where the women made the entering wedge, the men have been able to follow through with a speaker and to convince the audience of the reasonableness of our stand." This shows our doctor husbands are depending on us in our work. It is well to have joint meetings of Medical Societies and the Medical Auxiliaries and have a member of the Auxiliary to speak on these occasions. It gives the Auxiliary a golden opportunity to explain the aims and purposes of the Auxiliary. In this way we can show the Societies how we can aid them. Self education is something we must continue every day; so, that we may intelligently assist with the problems confronting the public today and in the future.

Regarding School Health Services we have the following suggestions:

- A.—1. Poster contests to encourage interest in health, with cash prizes which could be donated by the Medical Societies.
2. The success of these contests is largely due to Auxiliary efforts.
3. Motion pictures on health to lend to High Schools.

Rural Health Education Activities

1. Poster contest and movies could reach many School districts. Health posters could be placed in County Court Houses, Country stores, etc.
2. Speakers supplied to 4-H Clubs in Counties.
3. Health booths set up at Fairs.

B.—Programs could revolve around a quiz session in which teams of fourth, fifth, and sixth grade children, as well as any grade, from two classes or two schools compete in an attempt to answer the most questions asked by a master of ceremonies about a given health subject. A visiting expert in the health field under discussion acts as judge in case of dispute. It would be most effective to have some of this discussion broadcast by local radio stations.

Dr. W. W. Bauer—Director of the Bureau of Health Education of the American Medical Association—says "The time will never come when the medical profession can disregard its obligations toward the public in the field of health education. Regarding the distribution of pamphlets, the Woman's Auxiliary can be used very effectively." "Today's Health" can be used as a "tool for health education" and its "use will have to be stimulated." Dr. Bauer has written a book "Santa Claus, M. D." in which every Auxiliary member will be interested.

With the war continuing, we, as individuals, naturally want to help in every way possible. There are pamphlets and supplements available from your Medical Societies on First Aid and it is hoped that

PHYSICIAN'S DISABILITY INCOME

APPROVED
FOR MEMBERS ONLY
THE SOUTH CAROLINA MEDICAL ASSOCIATION

ACCIDENT OR SICKNESS—(NON-CONFINING)—SPECIFIC ACCIDENTS

Monthly benefit for accident FOR LIFE, per month -----	\$200.00
Monthly benefit for sickness -----	\$200.00
for first 12 months; \$100.00 per month FOR LIFE thereafter.	
HOUSE CONFINEMENT NOT REQUIRED	
Monthly benefit in hospital for three months -----	\$400.00

SPECIFIED TRAVEL ACCIDENTS

Monthly benefit FOR LIFE, per month -----	\$400.00
Monthly benefit in hospital for three months -----	\$600.00

FOR LIFE, monthly benefit -----	\$200.00
for loss of both hands, feet, eyes; one hand and one foot; either hand or foot and one eye.	
Loss of either hand or foot, monthly benefit for 20 months -----	\$200.00
Loss of sight of one eye, monthly benefit for 10 months -----	\$200.00
Loss of Life (Accident) -----	\$5,000.00
(and in addition, the monthly and hospital benefit for the period between date of accident and date of death)	

ABOVE BENEFITS DOUBLED
FOR SPECIFIED TRAVEL ACCIDENTS.

(The above illustrates one plan—other plans with different indemnities available)

Insuring Clause States Insured For "Accidental Bodily Injuries" (meaning any accident)

"SPECIAL FEATURES"

- *—Non-Cancelable Feature for members of South Carolina Medical Association.
- *—No waiting period—Benefits from first day, either accident or illness.
- *—Pays disability income benefits for life—covering both accident and sickness.
- *—There is no time limit or aggregate as to monthly payments.
- *—House confinement is NOT required in order to receive full benefits.
- *—Your individual policy can never be terminated or restricted after issue.
- *—There is no terminating age at which policy reduces or automatically expires.
- *—There is no increase in cost or decrease in benefits after issue.
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- *—A grace period is allowed for payment of all renewals.

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South Carolina was most fortunate in having our able President, Mrs. Alfred F. Burnside, selected to represent us as a participant in the Public Relations Panel in Chicago. We know she did it most effectively and your state public relations chairman appreciates her splendid information when she returned.

Mrs. P. M. Temples

KEEP UP THE FIGHT

Again the Chairman of Legislation urges you not to let down in your fight against National Compulsory Health Insurance. Echoes reach us that there is a feeling in our Auxiliary that we can abate our efforts to combat the forces of evil that would engulf the American public in a system of politically controlled medicine. These echoes are the results of a carefully prepared plan by Oscar Ewing, the Federal Security Administration and the other proponents of socialized medicine. They would lure us into a feeling of false security. Although Congress is concentrating on emergency legislation and planning, Mr. Ewing continues his campaign for Compulsory Health Insurance. In the Federal Security Agency's report for 1950 (Mr. Ewing is Administrator), he states in part, "The conviction stands that national health insurance is the best way yet devised to prepay the cost of medical care and make adequate medical services widely available."

Have you forgotten that President Truman in his State of the Union message early in January urged the enactment of legislation for National health insurance? Furthermore, have we forgotten that Congressman Dingle introduced H. R. 54 to the 82nd Congress within a week after its organization? This bill replaced the Murray-Wagener-Dingle health bill which passed out with the 81st Congress.

Again, we note with concern a paragraph in "Capitol Clinic" for Feb. 6, 1951, that President Truman has earmarked funds for the U. S. Public Health Service for the "start of a national compulsory health insurance program."

In the face of this information can we allow ourselves to be lulled into a state of inertia or shall we arouse ourselves with renewed energy to preserve a system of free enterprise for the medical profession.

Our method, you will recall, is to disseminate accurate information about socialized medicine to the public wherever and whenever the opportunity presents itself. When we have succeeded in arousing public opinion, we try to get an expression of this opinion in the form of letters from individuals or resolutions from organizations. This information is sent to our Congressmen, who are eager to hear the expression of public sentiment.

Our National Auxiliary was asked to help in this work by the American Medical Association. Our South Carolina Auxiliary has been actively and eagerly working all year. The public has been aroused in our state and many organizations have taken a positive stand against socialized medicine. Many more will do so if they are properly approached. Many county Auxiliaries have been working enthusiastically for endorsement; some have been working only indifferently.

Arouse yourselves, doctors' wives! This is a pivotal year for the medical profession and our doctors need the active and enthusiastic help which only our Auxiliary can give them. Let us work hard to put an end once and for all to this dangerous threat to medicine and to the welfare of the American people.

Mrs. Manly E. Hutchinson
Chairman of Legislation

GREETINGS FROM DR. TUTEN

It gives me a great deal of pleasure to send greetings to the Woman's Auxiliary of the South Carolina Medical Association. Your help and council has been of inestimable value to the Doctor's of the State. We are still in the midst of our fight against the Administrations' plan of Socialism and regimentation of our profession, but it looks a little brighter than it did one year ago. We are all looking forward to a large attendance and a good meeting at Myrtle Beach in May, and I hope to be able to greet each one of you there.

W. R. Tuten, Pres.
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MAY 15, 16, 17, 1951

MONDAY, MAY 14	Registration: Ocean Forest Hotel Lobby
TUESDAY, MAY 15	Registration
10:00 A. M.	Auxiliary Committee Meeting with Council of South Carolina Medical Association
3:00 P. M.	Finance Committee Meeting Mrs. J. L. Sanders, Chairman
3:30 P. M.	Student Loan Fund Committee Meeting Mrs. Vance W. Brabham, Chairman
4:00 P. M.	Jane Todd Crawford Loan Fund Committee Meeting Mrs. Lawrence P. Thackston, Chairman
5:00 P. M.	Executive Board Meeting Private Dining Room Mrs. Alfred F. Burnside, presiding
WEDNESDAY, MAY 16	Registration
9:30 A. M.	House of Delegates Private Dining Room Mrs. Alfred F. Burnside, presiding
11:00 A. M.	Program Meeting Private Dining Room Mrs. Alfred F. Burnside, presiding Invocation: Rev. A. C. Holler Address of Welcome: Mrs. Robert B. Durham, Convention Chairman Guest Speaker: Mrs. Arthur A. Herold, President, Woman's Auxiliary to the American Medical Association
1:00 P. M.	Auxiliary Luncheon (Dutch) Ocean Forest Hotel, Upper Terrace Guest Speaker: Mrs. Leone S. Thompson, President, Woman's Auxiliary to the Southern Medical Association Post Convention Executive Board Meeting (Time and place to be announced) Mrs. Kirby D. Shealy, presiding
WEDNESDAY EVENING	Banquet: South Carolina Medical Association, Host, Ocean Forest Hotel

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A Report On The Safety And Therapeutic Effectiveness Of Parenterally Administered Chloromycetin By The Intramuscular And Intravenous Routes

VINCE MOSELEY, M. D.^o
WADDY G. BAROODY, M. D.^o
Charleston, S. C.

Oral chloromycetin is well-recognized as an antibiotic of rather broad therapeutic range in regards to bacterial, viral, rickettsial, and spirochetal infections, and as one with marked specificity for certain of the salmonella group of organisms.¹

Recently, this drug has been prepared for intravenous administration by dissolving it in acetyl dimethylamine. It is prepared in ampoule form in a concentration of 0.5 gram per 2 cc. of solvent.[†] For intravenous use this preparation may then be added to solutions of 5% glucose in physiological saline solution, or to solutions of glucose and distilled water, in proportion of 0.5 gram to 1 gram of chloromycetin, per 2 to 4 cc. of acetyl dimethylamine per 250 to 500 cc. of glucose or saline solution, and at this dilution strength it may be given intravenously very safely. To date, we have employed chloromycetin intravenously in 11 patients and have observed no ill effects. Therapeutic blood levels were maintained after such intravenous administration for periods of 6 to 8 hours with 0.5 and 1 gram doses.

Observations made at regular intervals after both the 0.5 gram and 1 gram doses revealed that after 6 hours the serum concentration of the drug fell off very sharply to levels below those theoretically desirable for therapeutic reasons. As a result of this sharp fall in concentration after six hours it appears desirable that the drug be given by this route at repeated intervals of at least every six hours.

In so far as the intravenous route for the administration of chloromycetin in adequate dosage also necessitates the giving of rather large volumes of fluid,

a feature which at times is not desirable, an effort has been made to evaluate the rapidity of absorption, blood level concentration, therapeutic effect, toxicity, or other possible deleterious effects that might result from the use of the drug by the intramuscular route. To date, 34 patients have been treated for various infections with chloromycetin administered intramuscularly. The same preparation as used for intravenous administration was employed. It was not diluted but given directly by intramuscular injection upon withdrawal of the solution from the ampoule.

In each instance the deltoid and/or the gluteal muscles were used routinely for the sites of injection. There was an immediate but transient, and only slightly uncomfortable sensation at the time and site of administration; #21 or #22 gauge intramuscular needles were employed. The immediate discomfort was no more than that usually observed with other drugs given by this route. One patient developed a sterile abscess at the injection site (deltoid); this was due, we believe, from failure to inject the solution deeply in the muscle. This was the only patient to manifest any untoward reaction, either local or systemic. In none of our patients has evidence of bone marrow depression, neutropenia or evidence of renal or hepatic toxicity been encountered from the use of this drug parenterally.

A variety of infectious diseases were treated: recurring parotitis (1), specific infectious arthritis, due to Beta hemolytic streptococcus (1); lymphopathia venereum (2); pneumonia; pneumococcal (1), tuberculous (2), monilia (1), pneumonia, of mixed bacterial types (17); urinary infection, due to E coli (2), idiopathic ulcerative colitis (1), murine typhus (1), peritonitis mixed organisms (2); infectious mononucleosis (1), otitis media (mixed infection) unresponsive to Penicillin (1), paratyphoid fever B (1). These patients were treated over periods of time

^oFrom The Department of Medicine, Medical College, State of South Carolina, and The Roper Hospital, Charleston, S. C.

[†]Supplied by Parke, Davis and Company to us in this form for this study.

ranging between four days and three weeks. The ages of the patients varied from 7 months to 75 years of age. The clinical responses observed determined the duration and intensity of the individual therapeutic attempt. In most instances the response to intramuscular chloromycetin was satisfyingly prompt. The only exceptions were one patient with lobar pneumonia, who responded less rapidly than anticipated (a specific bacterial diagnosis was not obtained in this case); two patients who, on further study, were found to have pulmonary tuberculosis also were therapeutic failures; and lastly, a moribund patient with generalized peritonitis who died within 36 hours of starting the drug.

Serum concentration levels of chloromycetin were determined by the microbiological assay method; *Shigella sonnei* being the test organism used.²

The average concentrations of the serum chloromycetin levels that we have observed following the oral, intravenous, and intramuscular administrations of this drug may be seen by reference to TABLE 1. As may be seen from this, good therapeutic levels were obtained within two hours time after intramuscular injections. The levels were not materially in excess of those that were observed with comparable doses given orally, however.

Interestingly enough, both the oral and intramuscular routes showed the same phenomenon of the levels rising to their maximum concentrations up to the 6th hour after administration, and then falling off sharply in the next 2 hours. By repeating the maintenance dose, either orally or intramuscularly, at 6 hour intervals, usually 250 milligrams, a sustained level of 5 micrograms per cc. could be maintained day after day. Longer intervals between injections resulted in a decrease in concentration below that theoretically desirable. The intravenous concentrations fell off more sharply after the 4th hour, thus indicating that with this route Q 4 h administration must be employed if very high levels are desired.

As examples of the types of clinical responses that have been observed with the parenteral administration of chloromycetin, the following five case reports are cited as appropriate illustrations. The first three of these patients were treated with intramuscular chloromycetin and the last two patients were treated initially with intravenous chloromycetin and maintained by intramuscular administration of the drug.

CASE REPORT: #1 J. I., a 72 year old white male was admitted to the hospital with a generalized macular erythematous eruption and a temperature elevation of 102°F. His chief complaint was generalized aching. The blood cultures were negative. WBC= 16,100; RBC= 4,050,000; Hbg. 14.0 grams. Agglutination tests with proteus OX-19 and OX-2 gave high titre agglutinations. With OX-2 a titre of 1:7120 was reported. Later complement fixation tests were also found to be positive for murine typhus. Before a diagnosis of murine typhus had been established

penicillin in adequate dosage had been employed without any evident response. Chloromycetin was started the third hospital day, 0.5 gram every 4 hours for 7 doses were given, and then 250 milligrams every 4 hours for 5 days were given. After this time the drug was continued at intervals of every 6 hours for 6 more days. In all there were 12 days of therapy; initial blood chloromycetin levels averaged 6 to 10 micrograms per cc. with a maintenance level of 5 micrograms per cc. Within 36 hours the patient showed symptomatic improvement and his temperature returned to normal and remained so. There was no relapse after discontinuing therapy, and he was discharged symptom-free and without sequelae after 21 days.

CASE REPORT: #2 C. H., a 13 year old colored female was admitted to the hospital with a painful, swollen and inflamed right shoulder joint. Her temperature was 102°F. Laboratory studies revealed WBC= 15,550; Hbg=11.0 grams; RBC= 4,460,000; urine essentially normal. Upon aspiration of the joint purulent fluid was obtained from which a Beta hemolytic streptococcus was cultured. Intramuscular chloromycetin was given in a dosage of 250 milligrams every 6 hours for 6 days, then every 12 hours for 2 days; the maintenance blood level of chloromycetin was 5 micrograms per cc. The joint was free of pain and swelling after 48 hours, and she was completely afebrile in 72 hours. There was no relapse subsequent to discontinuing the drug and she was discharged as cured.

CASE REPORT: #3 W. S., a 51 year old white male was admitted to the hospital with the complaint of severe abdominal cramps, with diarrhea accompanied by severe tenesmus. Stool cultures were positive for *Salmonella Schottmuelleri*. He was treated with intramuscular chloromycetin, 250 milligrams every 4 hours for 5 days. No oral chloromycetin was given, it being desired to determine if the parenteral form of administration would prove as efficacious as the oral route is known to be in this type of infection. Within 36 hours tenesmus and diarrhea decreased. Coincident with symptomatic improvement the stool cultures became negative. Repeated stool cultures 2 weeks after discontinuing therapy were free of *Salmonella Schottmuelleri* and the patient was discharged. Follow-up in the Outpatient Clinic has revealed no clinical or bacteriological relapse over a two month's period.

CASE REPORT: #4 M. M., a 28 year old colored male admitted to the Roper Hospital with a history of cough, chills and fever of four days duration, with pleural type pain associated with respiration. Physical examination revealed the temperature to be 103°F, and the classical signs of a right lower lobe pneumonia; confirmed by x-ray. Initial laboratory findings were: WBC= 14,350; RBC= 4,050,000; differential smear revealed 85% polymorphonuclear leucocytes and 13% lymphocytes. A sputum culture revealed

Streptococcus viridans and *M. catarrhalis*.

Treatment consisted of an initial dose of 1 gram of chloromycetin given intravenously at 8 hour intervals for 2 doses, then 250 milligrams was given orally every 6 hours; initially we obtained blood levels of chloromycetin of 8 to 10 micrograms per cc., then maintained a level of 5 micrograms per cc. This was continued for one week. Symptomatic improvement was noted within 24 hours and the patient's temperature was normal, and remained so 36 hours after treatment was initiated. The patient was discharged after a rapid and uneventful recovery.

CASE REPORT: #5 M. M., a 49 year old colored female was admitted to the hospital with pain in the chest associated with respiration, cold and cough of 2 days duration. The temperature was 103°F. Impression by physical examination, substantiated by x-ray of chest, revealed a right middle and right lower lobe pneumonia. WBC 14,000, Hbg. 8 Grams.

Therapy instituted was 2 grams of chloromycetin intravenously initially, then 1 gram intravenously every 6 hours for three doses totalling 5 grams by this route during the first 24 hours. The patient was then maintained on 0.5 gram of chloromycetin every 6 hours orally. In this case our initial blood level of chloromycetin was above 20 micrograms per cc. and subsequently, maintained at 5 to 7 micrograms per cc.

Her response was dramatic. The temperature fell to normal within nine hours after therapy was instituted. She was discharged completely recovered after 10 days.

SUMMARY AND CONCLUSIONS

An evaluation has been made of the clinical and therapeutic effects and of the serum levels of chloromycetin that are obtained when this drug is administered parenterally by intravenous and intramuscular routes. The study comprises our experience to date in a total of 38 different patients, some of whom received the drug by both parenteral routes.

To date, in our limited experience, we believe that we have demonstrated that chloromycetin when dis-

solved in acetyl dimethylamine may be safely administered intravenously or intramuscularly. As yet, no ill effects by these parenteral routes, such as allergic or toxic reactions, have been observed by us. Neither have signs of bone marrow depression, neutropenic reaction, or evidences of hepatic or renal damage been observed in the patients we have treated. Chloromycetin has been administered to some members of this group of patients for as long as 3 weeks by intramuscular injection with no evidence of sensitization or toxicity developing in any during that period of time. Infants and aged individuals as well as young adults comprised the members of the patient group. It also is evident from our observations on 34 patients that chloromycetin when dissolved in acetyl dimethylamine can be administered in undiluted form intramuscularly without adverse local effects. The usual dose employed was 0.5 to 1 gram with additional doses of 250 milligrams to 0.5 gram as a maintenance dose at 6 hour intervals. Precautions to give the preparation deeply in the muscle should be taken to insure against local tissue necrosis and also to reduce the patient's discomfort at the time and site of injection. Adequate therapeutic blood levels were maintained by this means of administration.

This is the first reported instance wherein this type of chloromycetin solution has been employed for intramuscular use. It is obvious that this finding will extensively broaden the use of chloromycetin as an effective therapeutic agent.

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(2) The Method for Microbiological Assay and the Test Organism, *Shigella sonnei* were furnished us through the courtesy of Parke, Davis and Company.

TABLE I

Dose and route of Administration	TIME (HOURS) Post Administration Concentrations in Micrograms per c. c.						Maintenance levels c Q6h Doses	REMARKS
	1	2	4	6	8	24		
1 Gm. I. V.	20	16	14	4.5	1.25	0		Average levels in 6 patients
.5 Gm. I. M.	1.25	2.5	5	5	2.5	0	5-6 mcg/cc	15 patients
.5 Gm. Orally	1.25	2.5	2.5	5	2.5	0	5 mcg/cc	10 patients
250 mgm. I. M.	1.25	2.5	2.5	5	2.5	0	3-5 mcg/cc	4 patients
250 mgm. Orally	1.25	1.25	2.5	5	1.25	0	3-5 mcg/cc	5 patients

Common Pitfalls In Surgical Anesthesia

JOHN M. BROWN, M. D.†^o
Charleston, S. C.

Surgery is oftentimes complicated by alarming and, frequently, serious problems arising from anesthesia.¹ The anesthesiologist, a physician with special post-graduate training in anesthesia, can assume the initiative under such circumstances, yet, whenever such an individual is not available, the surgeon in charge of the patient must bear this additional responsibility.

Meticulous attention, however, to certain details of the operative period can eliminate some of the anesthesia "pitfalls" just as certainly as strict adherence to established surgical principles can prevent subsequent surgical complications.

The simple classification of "minor and major operative procedures" does not hold true in anesthesia. This is because of the fact that each anesthetic agent, regardless of its reputation for safety, if improperly employed, may produce damage to some vital system of the body.² In fact, the "whiff of gas," "s squirt of Pentothal," or "few drops of ether" can produce a greater morbidity and mortality than the anesthesia in many "major" cases wherein one usually anticipates the worst complications and practices adequate preventive medicine.

PREOPERATIVE STUDY

Many serious "pitfalls" occur from inadequate preoperative study and preparation of the surgical patient for anesthesia. One is prone to forget that such factors as nervous tension and accidental trauma greatly increase the emptying time of the stomach,³ and that a gastric tube may require hours instead of minutes to aspirate all gastric contents.

Routine laboratory work occasionally reveals that the hemoglobin is less than 12 grams. In many institutions today, this degree of anemia contraindicates any elective surgery until the condition is corrected by the appropriate medical regimen or by transfusion therapy.

The discovery of certain pathological processes within the body precludes the use of some of the anesthetic agents because of their pharmacological actions. For example, wide clinical experience has shown that asthmatic patients do not tolerate the thiobarbiturates or cyclopropane in high concentrations; that chronically-ill patients with electrocardiographic evidence of toxic myocarditis do not tolerate suboxygenation with nitrous oxide. A history of

coronary insufficiency contraindicates spinal anesthesia because of possible hypotension, and the presence of acetoneuria in an acutely-ill, dehydrated child contraindicates ether anesthesia because of the possibility of acidotic convulsions.

A history of allergy is of importance since reactions to certain regional anesthetic agents occur as a result of cross-sensitivity to other compounds with chemically similar molecules. These examples, and many others, illustrate the fact that adequate preoperative study and preparation of the patient are essential to uneventful anesthesia throughout surgery.

PREMEDICATION

Preoperative medication of the patient is frequently the cause of anesthetic complications.⁴ Excessive mucous formation, bronchospasm, poor muscular relaxation, overdosage of anesthetic agent, apnea, and ventricular fibrillation are some of the "pitfalls" which may result from improper medication. Most authors believe that all patients should receive premedication in a therapeutic dosage at least one hour before induction of anesthesia to assure maximum absorption of the drugs from the subcutaneous or intramuscular depots. The practice of routinely ordering drugs "on call to the O. R." is likely to lead to some of these complications.

A suitable preoperative routine includes a short-acting barbiturate the night prior to surgery, again on the morning of surgery if necessary for hypnosis, and an opiate and belladonna derivative in a 25:1 ratio, one hour before surgery. An obese patient does not require more premedication than a slender one. In fact, his metabolic rate is likely to be lower on an endocrinological basis, and thus require less medication.

Pediatric patients⁵ and geriatric patients⁶ tolerate small dosages of the opiates as well as young healthy adults, if the reflex irritability of these individuals is taken into consideration when arriving at the dosages. Chronic alcoholics are adequately sedated with paraldehyde in large dosage. Drug addicts and patients who are in shock are best premedicated by slow, symptomatic, intravenous injection.

ANESTHETIC AGENT AND TECHNIQUE

The choice of an anesthetic agent and technique may appear to be the most important consideration in sidestepping various "pitfalls." This is true to a certain extent, yet in arriving at this decision, several related factors must be taken into consideration. The pharmacology of the anesthetic agents, the potential dangers of certain techniques, the clinical experience of the individual administering the anesthetic, and

† Assistant Professor of Pharmacology and Surgery (Anesthesiology), Medical College of the State of South Carolina, Charleston, S. C.

^o Presented at the Edisto Medical Society Meeting, Orangeburg, S. C., September 27, 1950.

the specific requirements of the surgery are all very important considerations. Quite often, more than one agent or technique may be used with equal advantage. For example, regional anesthetic methods are preferable in diabetes mellitus, yet inhalation anesthesia is equally as safe if one employs rational therapy to correct the specific metabolic disturbances produced by the anesthetic agent in the presence of diabetes.

Paraldehyde may be administered safely by the oral or rectal route for basal narcosis, yet intravenous administration produces multiple, small, pulmonary emboli manifest by violent coughing attacks. Chloroform as an obstetrical *analgesic* agent has withstood a century of usage; as an *anesthetic* agent, it has been discarded. Certainly we have safer anesthetic agents than the ultra-short acting barbiturates for operations upon the respiratory passages such as tonsillectomy and bronchoscopy!

Therefore, only after careful consideration of all of the various factors involved in any specific case can one select the appropriate anesthetic agent and technique.

POSTOPERATIVE PERIOD

The annexation of the immediate postoperative period is said to be one of the greatest tasks which anesthesiologists have undertaken. Without a doubt, most anesthetic deaths immediately following surgery are due to respiratory obstruction originating from deeply anesthetized patients "swallowing the tongue." Of course, this is anatomically impossible, yet the relaxation of the various muscle groups which support the tongue permits it to fall against the posterior pharyngeal wall and occlude the glottic aperture. Death may result within a few minutes if the obstruction is not relieved. A judiciously placed airway or simple manual elevation at the angle of the mandible can easily prevent this from occurring.

Shock frequently occurs in the immediate postoperative period. Experimental work has shown that it frequently becomes necessary to replace not only the amount of blood which is lost during a surgical procedure, but even more because of undue surgical trauma. Various laboratory data and the clinical appearance of the patient will usually lead to some rational approach to shock therapy under these circumstances. Quite often, .5 mg. of neosynephrine hydrochloride, intravenously, will elevate and sustain the blood pressure when it is due to neurogenic peripheral vasodilation.

Morphine produces severe, postoperative smooth muscle spasm in some patients when used for sedation following anal operations and in the presence of urethral retention catheters. This spasm establishes a vicious circle and requires even more morphine for pain relief. The usual result of this is a patient who is very heavily sedated. Therapeutic dosages of Demerol for the relief of pain is indicated in these individuals.

Postoperative atelectasis occurs quite commonly and usually precedes "ether pneumonia." Adequate tracheal suction with a 16F rubber catheter becomes necessary if frequent turning and coughing exercises do not prevent this. A mixture of 5% carbon dioxide and 95% oxygen may be used for the prevention of atelectasis, yet it is rarely of benefit in the treatment of this condition once airless lung is discovered. Most of these "pitfalls" of the immediate postoperative period can be anticipated and adequately treated, provided the individual who assumes the responsibility for anesthesia realizes that the operation is not over with the termination of surgery.

SUMMARY

Quite frequently, the surgeon is called upon to treat anesthesia complications during surgery. Many serious anesthesia "pitfalls" occur in connection with "minor" surgery, so a "minor" surgical procedure needs more than "minor" anesthesia. Under all circumstances, one should direct careful attention to preoperative examination and preparation of surgical patients for anesthesia, premedication, the choice of anesthetic agent and technique, and the immediate postoperative period to prevent these "pitfalls."

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Alcoholism, A Challenging Problem Of Today

ORIN ROSS YOST, M. D.*
Orangeburg, S. C.

Among the numerous baffling problems with which mankind is confronted today is that known as alcoholism. Though within the past decade, research has unearthed many significant factors long hidden to science, it must be admitted still that no scientist yet fully understands the condition called alcoholism. Because of the increasing incidence of alcoholism in our own country today, this condition presents a problem not only to the medical field but also to the social, psychological, economic, political and religious fields.

It has been estimated that within the bounds of America, among those who have reached the "drinking age" are to be found 65,000,000 people. Included in that number are three million *excessive* drinkers and 750,000 *compulsive* drinkers. The members comprising this last category are also known as *pathological* or *chronic* drinkers, individuals who have become enslaved by the compelling powers of drink. Is it any wonder that crimes perpetrated because of criminal behavior on the part of alcoholics are daily reiterated in newspapers and over our radios? Is it any wonder that pedestrians and sane drivers are daily victimized by misguided steering wheels in the hands of unsteady, maniacal alcoholics? Is it any wonder that the innocent girlhood of America is being preyed upon daily by poorly adjusted, psychopathic, sexually-disturbed alcoholics? Is it any wonder that ten per cent of the beds in mental hospitals are being filled today by alcoholics who have so lost the semblance of their former selves that both body and mind are crying out for relief? Is it any wonder that today, when statistics show a 30 per cent increase in alcoholism over the record of the past four years, this insidious disease should be labelled a "cancer of the ego" or America's "No. 1 emotional illness?" When problem drinkers become 50 per cent greater in number than the known sufferers from tuberculosis, surely it is time for not only the medical agencies but also the concerted effort of educational, social, legal, religious, industrial and governmental agencies to attack this serious menace which victimizes two out of every one hundred adults who drink and which numbers 1,000,000 women within its category of excessive drinkers.

A recent issue of the *Kiwanis Magazine* reminded the American public that alcoholism had become not only a medical problem in which seven per cent of the adult males and one and one half per cent of the adult females were directly involved but also a mammoth sized economic problem, costing through inefficiency, wage loss and reduction of productivity, a half billion dollars annually. Is America thinking

safely when she appropriates only one million dollars a year through her government and private agencies for coping with this great problem and yet spends a half billion to pay for its ravages? Is she viewing the problem from the right perspective when she pays out \$31,000,000 to maintain those same alcoholic offenders in hospitals, \$22,000,000 each year for the relief of their families, and \$25,000,000 a year in the wasteful expenditure of maintaining the offenders in local jails? Yet, I repeat, she spends only one million for research towards coping with the problem! Surely these figures smack of gross malfeasance. Unquestionably America needs to wake up to a fuller realization of a cancerous problem which, if its malignant spread is left unchecked, will eat out her vital organs and render her totally unhealthy. America needs to inform her populace regarding the possible plight in which all drinkers whose psychological and physiological "make-up" cannot handle alcohol will inevitably find themselves.

America needs to "shout upon the housetops" the scientifically-proved truth that *alcohol is not a stimulant*, as has been erroneously believed, but rather a *depressant* which, as it anesthetizes the higher centers of the brain, prompts the lower instincts to perform those primitive acts which the drinker would consider grossly improper or unbecoming in the ordinary walks of life. America needs to disseminate vast stores of information regarding this problem, as well as fostering concentrated research, instituting nation-wide campaigns and encouraging the establishment of Yale Plan Clinics similar to those appearing in New Haven, Hartford, Washington and elsewhere. With a new vigor, the strategy of which should be intelligently planned, America needs to attack this menacing social evil. But first of all, the nation needs to encourage straight thinking on the part of those people who still do not know that when once the "bite" of alcoholism has fastened its leach-like fangs upon a drinker of a particular constitution, he succumbs to the destructive powers of a malady far more crippling in its aspects than many of the malignant diseases of today. That alcoholism is a *deadly disease* and that the *chronic-drinker is an ill person* are facts to be no longer questioned by civilized man of the atomic age. When the alcoholic is allowed to remain in the gutter; when he is disparagingly referred to as the old "sot" or "soak"; and when he is lodged in the jail instead of the hospital, he receives derogatory treatment, perhaps because his illness is misunderstood, and the unfeeling populace from whom he needs pity and succor, heaps insults and maltreatment upon him just as an ignorant mother sometimes whips her child all the harder in an attempt to make him

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stop crying. Thus pictured, is it not readily seen that alcoholism presents a grave challenge to America today?

Etiology of Alcoholism

With 65,000,000 people in the United States out of a total population of 151,000,000 using beverage alcohol in some form, a mild degree of consolation results from the fact that among the 75 per cent of male adult users and the 65 per cent of female users, more than 90 per cent of these do not become chronic problem drinkers. What then might be said is the etiology of this deplorable condition which renders 3,000,000 males and 1,000,000 females partially or wholly unfit to function as normal individuals within the society to which they had formerly belonged?

Though there are many specific causes for drinking, it is believed by present day scientists that, with comparatively few exceptions, only persons with seriously maladjusted personalities develop into chronic alcoholics. It is true that some individuals indulge in drinking only upon special occasions and suffer no harmful effects. Many others, indulging more frequently, likewise suffer no ill; yet there are some who are unable to drink at all without suffering untoward effects. Belonging to the last-named classification are individuals who are generally anxious, immature, insecure, oversensitive and neurotic. To them alcohol represents a crutch without which they would feel unable to participate in society. Because of their feelings of inferiority, they thus seek exhilaration and emotional inhibition through alcoholic beverages.

It might then be said that some adults drink because they have learned that they can find release of tensions occasioned by business, unhealthy conditions in the home, or sexual disturbances. Others attempt to find oblivion from worry, depression and anxiety or the constant nagging of an incompatible mate. Some try to "drown their sorrows" caused by afflictions like epilepsy, rheumatism, schizoid tendencies, disappointments and failure to achieve their life ambitions. Others seek to forget self-consciousness, financial losses, boredom, sorrows attendant upon the death of loved ones or to forget the disagreeableness of moodiness or loneliness. Some drink to forget their guilt or to attain a degree of adjustment, which in ordinary life they have failed to attain. Some who are bashful and retiring seek for the ease of conversation that appears to flow from the bottle. Some drink because they are neurotic. Others drink because they seek an escape from reality. Some, because of an intense urge for excitement, seek emotional pleasure rather than rational behavior. Some, to whom unstable emotions of a nervous constitution have been handed down from an alcoholic parent, often turn to drink though they themselves were not born alcoholics. Many women drink because they erroneously believe it to be the "smart" thing to do in the so-called "gracious living" of present day society.

Psychic, Physiological and Social Aspects

Unfortunately, six per cent of those who began as social drinkers have been found incapable of controlling their appetites and have indulged in excessive drinking, only to discover with the passing of the years that they have developed an addiction to alcohol from which they are wholly unable to extricate themselves. Having previously believed that their wits were sharpened, they have awakened, alas, to find that they had become dulled instead. Having thought that so-called alcoholic stimulation would enable them to adjust with comparative ease to the requirements of the group, they have realized that they have conducted themselves on a plane altogether unbecoming to the normal patterns of behavior. Having once believed that alcohol was a food, they have awakened to realize that the malfunctioning of their organs and the development of personality disturbances are the result of the fact that alcohol, though a calory-producing food, is absolutely devoid of vitamin content. Having once been influenced by their friends to take a drink, they have come to realize that they themselves are now scorned, rebuffed and ostracized. "Who," one will ask, "are these 'six per centers' who seem apparently to prefer the alcoholic unrealities of living to their former patterns of behavior?" Yes, who are these compulsive drinkers who, even though they try to desist from drinking, are unable to do so? Scientists believe those alcoholics who will continue gradually to deteriorate are they who have encountered some conflict or life problem for which they could discover no solution. In many cases these people were sick before they developed illness of body and mind as they continued to drink excessively, having once found a way to escape from reality.

Hence alcoholism is not really a disease but the symptom of a major problem crippling 750,000 individuals in this country today, and indirectly affecting also the total population of 151,000,000 Americans. Though there exists no particular category to which one could assign the chronic alcoholics, and though it is not yet possible for one to look into the "seeds of time" and predict which individuals will grow into alcoholics, yet the consensus of scientists today is that compulsive drinkers represent maladjusted people with personality problems based possibly on such things as inferior emotional and intellectual abilities, overattachment to a parent, marked moodiness, depressions and phantastic-mystical tendencies, lack of self-control, sexual difficulties, diminished initiative, economic insecurity, tendencies toward mental illness and numerous other personality deviations which rendered the individual incapable of adjustment to life. Having once tasted the tempting elixir which temporarily rendered him immune to his disturbances and acted like a welcome, soothing balm, he continued to drink more often than did his fellows and to imbibe larger amounts than did they. Then he began to drink in secret or even to sneak around to secure his drinks,

and disliking the reproaches of his family and friends, he sought to bury his anxiety, nervousness, tremor and sweating in the bottle, being unable to endure the censure or face the conflicts. As time moved on, excessive drinking began to affect his status in the family and in the community. Likewise affected were his disposition, his morals and his health. Powerless to help himself, he became ill in body and more markedly disturbed in mind. As a chronic alcoholic he had thus become a medical, psychiatric and social problem, regarded by many as weak-willed, and an object of scorn, pity and ridicule. Thus he who once thought alcohol the crutch so essential to his easy passage through the boulder-strewn highways, has entrusted the weight of his person to its fragile support, only at last to collapse upon it.

Syndromes Observed in Alcoholism

When excessive drinking becomes pathological, physiological disturbances in the chronic alcoholic express themselves in liver dysfunction, nutritional deficiencies, especially that of thiamine, gastritis, eructation, anorexia, pellagra, faulty metabolism, nausea, emaciation, constipation, renal changes and cardiovascular damage. By far the greatest damage seems to be done to the nervous system of the individual. This manifests itself in tremors, twitchings, speech impairment, paresthesias, pain and burning sensations, sexual impotence, irritability, numbness, stomach complaints, and so forth.

Personality Deterioration

As the course of chronic alcoholism progresses, the individual, now undersocialized, experiences a feeling of hopelessness and of personal inadequacy. There may develop impairment in emotional control and because of an increasing incapacity for inhibitory control, the individual is likely to grow unreliable, dishonest and impulsive. Poverty of ideas and inability to concentrate result. Faulty reasoning, poor judgment, evading of responsibilities, distrust and false accusations of one's mate are commonly observed. During the later stages, the individual suffers the additional discomforts of lack of money, shelter, job, clothes, accumulation of debts and frequent threats of court action. Oftentimes inebriates merge from such deteriorated personality patterns into actual dementias. The psychoses which the chronic alcoholic is likely to develop include:

(1) *Delirium Tremens*. This dreadful disturbance has an acute onset, being characterized by intense fear and anxiety, also by hallucinations, usually visual, in which the patient sees small, dark-colored crawling objects which seek to threaten him. The sleepless patient has a rapid pulse with fever, low blood pressure and kidney disturbance. This frightful malady is accompanied also by great apprehension, tremor and ataxia. Avitaminic therapy with thiamin chloride and nicotinic acid is effective. Hydrotherapy and routine spinal drainage should likewise be carefully employed.

(2) *Korsakoff's Syndrome*. Many changes in the nervous system are noticed in this psychosis. This malady is characterized by severe loss of memory, also delusions, hallucinations and confabulation. Severe muscular aches and pains, as well as neuritis in some instances, are other characteristics. A deficiency in Vitamin B₁ is suspected in this syndrome.

(3) *Alcoholic Hallucinosis*. This also is a serious disturbance in which hallucinations, not visual, but auditory in which voices, sharp, clear, warning, and threatening, are heard by the patient. There are also delusions of persecution.

(4) *Wet Brain*. This pathologic condition, sometimes following several attacks of delirium tremens is a serious condition with a poor prognosis. The syndrome is characterized by fixed facies, coma, mutterings and a purposeless picking movement of the hands.

Treatment of Alcoholism

Thus it is seen that the chronic alcoholic is not to be considered a weakwilled stumbler but rather a very ill person who was rendered, because of some reason not yet clear to science, absolutely incapable of resisting the craving for drink. Alcoholism, therefore, presents a problem of major importance and a challenge to the nation for a more humane treatment of those addicts who have fallen victim. It is readily seen then that the alcoholic must be treated not only for the purpose of removing his physical discomforts and craving for drink but also for removing the underlying personality disturbance which has prompted him to resort to excessive pathological drinking. The alcoholic, sick in thinking and behavior, is, in the words of Dr. Robert Seliger, aptly compared to a towering iceberg, the underlying part of which, though unseen, serves as a significant part from which that part seen by the world emerges.

As has been noted, the alcoholic distraught by fear, pain, mental and physical waste, is powerless to help himself. Fifteen years ago, cure of the chronic alcoholic was somewhat rare; but today, what with the advent of new psychiatric therapies and the fruits of research efforts, more cures and rehabilitations of the alcoholic are being effected.

It is necessary that therapy be directed along the lines of (1) personality analysis of each chronic alcoholic in order to determine the factor which drove the person to addiction; (2) re-education in order that the patient, after having clearer insight into the disturbing factor of his personality, will be able to direct the future course of his life according to more acceptable routines; (3) the use of medications for implanting an aversion to alcoholic beverage.

Fortunately one hears of recoveries from alcoholism resulting from religious experiences or occasionally, from reform measures on the part of the patient himself. Some resort to the highly-specialized dis-

cipline known as psychoanalysis and some treat with heavy doses of insulin (up to the shock point) and psychotherapy. Widely used today in many hospitals is the following therapy:

1. Withdraw alcohol abruptly or gradually according to appropriate types of cases.
2. Give sedative medication judiciously, paraldehyde being preferred and morphine condemned.
3. Omit restraints unless absolutely necessary.
4. Give carbohydrates in large amounts.
5. Administration of sodium chloride in attempt both to combat dehydration and to restore the normal acid-base equilibrium of the body.
6. Provide a high caloric, vitamin-rich diet. In appropriate cases, intramuscular or intravenous vitamin medication should be resorted to immediately.
7. Force fluids.
8. Do lumbar puncture for diagnostic purposes only.
9. Treat complication and precipitating factors with specific therapy such as the use of sodium dilantin for the avoidance of delirium tremens.
10. Give individual psychotherapy according to the needs of the patient.

"Sub-shock doses of insulin combined with glucose are helpful in some cases of hyperactivity and electro shock has been used effectively in the belligerent and depressive cases of acute alcoholism to render them accessible to psychotherapy. Benzedrine may also be helpful as an adjunct to psychotherapy in post toxic depressive reactions," says L. Sharp, M.D.

In my own treatment of alcoholics in a private institution during the past two-year period, I have successfully used the method described above and occasionally have found it necessary, as Dr. Sharp suggests, to effect amenability to psychotherapy through electro-convulsion. During 1949 and 1950, I treated 125 males and 31 females for alcoholism, as well as 13 males suffering from alcoholic psychoses, all of whom responded successfully to this treatment. The ages of these male patients ranged from 25 years to 70 years while those for the females fell into the 25 to 60 age bracket.

To Jacobson and Hall in Denmark goes the credit for producing the new sensational drug known as Antabuse, recently placed on the American market. Though extreme caution is necessary in the administration of this potential drug, many experiments are being carried out with it. Numerous social remissions have been reported and some failures also. Doctors A. E. Bennett, Turk and McKeever report the use of Antabuse among 18 males and 9 females in a psychiatric ward of a general hospital. Sixteen recoveries resulted. Bennett and his associates at the conclusion of the treatment, stated that though the drug shows great promise, Antabuse should not yet be released for general use, further research on it being highly necessary.

The conditioned reflex treatment of alcoholism combined with psychotherapy is still producing effective recoveries. This treatment, fully developed in Russia and the U. S., employs the use of apomorphine or emetine and renders the patient teetotal for at least a year. Dent now believes that the efficacy of apomorphine is due not to the production of a conditioned reflex but rather to the specific stimulant action of apomorphine on the hind-brain, particularly the medulla.

Those advocating the Keeley cure, also the physicians of Knickerbocker Hospital, as well as those in many general and private hospitals, advocate close affiliation of the alcoholic with the splendid lay organization known as Alcoholics Anonymous, an eleven-year old social reform movement, basically religious and motivated by a desire to help other alcoholics. This organization with a present membership of 80,000, has ten branches operating in Australia at present. Each year it reaches out to assist in the rehabilitation of 20,000 new cases and reports that 50 to 75 per cent of their 90,000 alcoholics have been able to remain free of their former compulsion to drink. Dr. H. M. Tiebout reports an investigation of the "conversion phenomena" under the influences of Alcoholics Anonymous. He believes that the act of surrender in conversion initiates the switch from a negative to a positive attitude in life.

Within recent times a new endocrine treatment of alcoholism has been devised. It is believed that when blood sugar falls to a certain level, the result is a craving for alcohol which manifests itself in symptoms similar to those of hyperinsulinism. When the liver becomes infiltrated with fat, it cannot detoxify the estrogens and sex changes result. This condition can be remedied by administering the adrenal cortical hormone.

One of the most promising treatments to attract wide-spread attention recently was reported by Dr. James J. Smith of Bellevue Medical Center, New York City. Dr. Smith treated patients suffering from Korsakoff's psychosis, acute alcohol intoxication and delirium tremens by administering A C T H and A C E (adrenocortical extract). When treating delirium tremens with A C T H, improvement ordinarily noted in the past as beginning within 48 to 72 hours, began to show itself within 3 to 10 hours. In each of the other types of psychoses these preparations were also effective. One of the significant findings of this new therapy is that delirium tremens is an expression of adrenal exhaustion.

It is the candid opinion of the writer who, for a period of twenty years, has worked with all types of alcoholics, that when so called "social drinkers" begin to realize alcohol is taking a firmer grip upon them, there is every belief that through cooperative effort with the psychiatrist, they have a splendid chance to throw off the drink habit. Also it is the opinion of the writer that for the drinkers who are just beginning to

merge into the addiction stage, there is likewise a chance for recovery. For those who, on the other hand, have so chronically enslaved their physical and mental powers to alcoholic beverages that deterioration and gross disturbances of the personality have resulted, there is small hope for a permanent recovery. Various therapies known to present day scientists will avail temporarily, but only so long as the deteriorated faculties of the mind of addicts can discipline themselves to refrain from even one taste of alcoholic drinks. Thus, for the psychopathic type of drinker and the chronic alcoholic, the writer would warn that alcohol proves as truly poisonous and malignant as a cancer. The wise use of psychotherapy, both individual and group, is employed by the therapist who seeks to impress upon the addicts the importance of never reverting to alcohol or any other alcoholic beverages after treatment.

Rehabilitation of Alcoholics

With a problem so baffling and of such mammoth proportions as to render 4,000,000 Americans out of control, the time is ripe for more effective measures at rehabilitating the alcoholic. It is urgent that the great American public become better informed regarding this cancerous malady afflicting not only the drunken psychotics, the drunken morons, the drunken non-psychotic personalities, the social misfit drinkers and the problem drinkers, but also affecting the health and safety of the whole country itself. How many Americans today know that 12,000 people a year are killed by alcohol? That 8,000 are killed in automobile wrecks resulting from alcohol? That Americans since Repeal have spent \$88,000,000,000 on alcohol? That during the past year, Americans spent \$8,500,000,000 for the legal sale of liquor? That many cases of suicide unquestionably have their source in alcoholism? That 20 per cent of all felonies can be laid at the door of alcohol? That when an individual becomes enslaved by the drink habit, he is unmistakably an ill person and in dire need of help rather than exorciation?

Fortunately, within the past decade more scientific research has been carried out in the field of alcohol studies, and more concentrated efforts at rehabilitation of chronic alcoholics have been made than ever before. But with this praiseworthy movement only in its infancy, there is presented a mighty challenge to administrators engaged in the great cause of rehabilitation. Especially noteworthy are the programs operating in the Yale Plan Clinic, the Connecticut Pittsburg, Portland (Oregon), Washington, D. C., and so on.

As a result of pertinent observations of the past few years, administrators of these clinics named above have become convinced of the following valuable findings:

1. The task of rehabilitating the alcoholic is one requiring the cooperative efforts of participants

from the fields of medicine, education, economics, politics, religion, social welfare, the law, the radio and the press.

2. For carrying out a rehabilitation program, there must be an out-patient office or center, preferably with its own hospital and convalescent facilities or at least integrated with a hospital.
3. The public must realize that, though any illness or trauma such as typhoid, thrombosis or combat injury has its psychic concomitants, few can compare with alcoholism in its complexity of origins, duration, scope of effects on either the patient himself or on his relative.
4. No real cure for alcoholism has yet been found though recovery can be, and often is, attained.
5. Diagnosis at such a clinic includes not only an investigation into the physical and psychological conditions of the patient but also into his social conditions, as well as the drinking history of the patient.
6. Though the excessive drinking of alcoholic beverages and the attendant behavior are factors leading to the recognition of the sickness of alcoholism, it should be remembered that in its etiology, alcoholism is primarily psychosocial. Though somatic predisposition manifests itself, the dominant aspect of alcoholism will remain psychosocial. This aspect will not necessarily become altered through agencies like the city mission, the fail and the hospital, which serve merely as "drying out" functions. Though efforts at rehabilitation may start in such places, it must continue, following the patient's release and must be oriented to the ordinary life situation of the patient. Sometimes, however, specific changes in the environment may become necessary. Social and psychological reorientation of the patient's family may also become necessary.
7. The team in any rehabilitation center should include psychiatrist, physician, psychiatric social worker, psychologist, secretary-receptionist and typist.
8. The public must be apprised of the fact that the old approach of dealing with alcoholics through punishment is taboo, and the new approach through humanitarian treatment of the ill patient is proving dramatically successful.
9. The program of rehabilitation includes not only the therapeutic aspect but also the preventive aspect. It is also concerned with altering erroneous present day attitudes, or removing the stigma from alcoholism and of informing the populace regarding the true nature of alcohol as well as the true meaning of alcoholism. Dissemination of such information should be effected through the lecture platform, classrooms, reputable publications, civic organiza-

tions, the press, radio, professional conferences and other outlets. Now that television is being brought into the homes of the nation, including those homes where temperance is sought after, how vital it is that this remarkable device be used effectively and constructively rather than as a destructive, dramatic means for endorsing traffic in alcoholic beverages.

10. As stated by the Connecticut Commission on Alcoholism, the true goal in rehabilitation is "the return of the individual—more acceptable to himself, increasingly independent and not using alcohol—to the community in which he should be an acceptable member."

With the complexity of the problem of alcoholism so evident at the present time, it is indeed superfluous to state that, unless improved legislative measures are taken soon, this country will find its dilemma even more precarious. Of particular interest to the writer is the 1945 Connecticut law providing for the study, care and treatment of inebriates. Because this piece of legislation is worthy of emulation, I should like briefly to quote a description of its all-inclusive contents as explained by Dr. Selden D. Bacon in the *Quarterly Journal of Studies of Alcohol*, (September, 1945 issue):

It recognizes that alcoholics are sick people.

It recognizes the fact that alcoholics can be rehabilitated.

It recognizes a responsibility on the part of the government to meet this problem.

It calls for study of the problem.

It calls for public education on the subject of alcoholism.

It omits all mention of punishment as a means of controlling the problem.

It recognizes the necessity of diagnosis, the possibility of various forms of treatment and the advisability of probationary rather than institutional treatment whenever possible.

It offers free service to those requesting it.

It recognizes that many groups, individuals and official bodies have interests which are affected by the problem of alcoholism and that they have skills which may be required if rehabilitation and eventual prevention are to be realized.

It has accepted the principle of separate administration.

It has located responsibility in a new state board and has given to that board sufficient discretion and power.

CANCER

Edited by HENRY W. MAYO, JR., M.D., Charleston, S. C.

THE RADIOLOGICAL DIAGNOSIS OF INTRACRANIAL TUMORS

HAROLD S. PETTIT, M. D.

The following is a review of the potentialities, limitations and some of the pitfalls of x-ray examinations in intracranial tumors. X-ray examination of the skull is one of the primary procedures in the diagnosis of cranial and intracranial tumors, but a negative report on plain skull films is of no value in excluding the possibility of intracranial tumors. Fewer than half will produce demonstrable bone changes. A routine examination consists of a PA film, an AP occipital projection, and lateral stereo films. Special projections of the petrous ridges are obtained if there are signs suggestive of an acoustic neuroma or tumor of the cerebello-pontine angle. Projections vertically through the skull are not routinely obtained but are frequently found helpful when there are significant changes in the petrous ridges or the floor of the anterior or middle fossa. Below we have listed the findings that may be present to indicate a tumor. Not all of these indicate a tumor when they are seen. For instance an osteomyelitis or Hand-Schuller-Christian syndrome will produce bone destruction, but these lesions are relatively easily identifiable and will not be included in the discussion.

I. Bone Changes.

- A. Those due to generalized increased intracranial pressure.
 1. Widening of the sutures.
 2. Increased convolutional markings.
- B. Atrophy or erosion.
- C. Bone production.

II. Calcifications of the cranial contents.

- A. In tumor — meningiomas, astrocytomas, oligodendrogliomas, craniopharyngiomas.
- B. Benign calcifications.
- C. Physiological calcifications.

III. Contrast Studies — pneumography and angiography.

INCREASED INTRACRANIAL PRESSURE

Widening of the suture lines in children is definite evidence of increased intracranial pressure, and is not an infrequent finding in the cerebellar tumors of children that have partially blocked the fourth ventricle (Figure 1). However, this finding is of no help in localizing an intracranial lesion. After the sutures have closed generalized increased pressure may accentuate markedly the convolutional markings of the skull. These vary considerably normally and caution must be used in assigning them pathological significance.



FIGURE 1

AP occipital film of the skull demonstrating separation of the sagittal and lambdoid sutures in an 11 year old white female with a solid tumor of the left cerebellar hemisphere, extending into the vermis. The separation is due to an increased intracranial pressure secondary to a block of the fourth ventricle.

These increased convolutional markings are much more striking in infants with premature closure of the cranial sutures.

Atrophy and erosion of bone is most often found in the sphenoid bone in the neighborhood of the sella turcica. The clinoid processes and the dorsum sellae are particularly susceptible to pituitary adenomas, craniopharyngiomas and dilatation of the third ventricle. Of the three pituitary adenomas, the basophilic is the least likely to alter the sella and we do not expect to find pressure changes. There may be marked decalcification but this is part of the generalized osteoporosis of the disease. The acidophilic and chromophobic tumors as a rule cause destruction of the floor or dorsum of the sella and less often erosion of the tuberculum. An early change is thinning of the dorsum sellae. Unfortunately, any prolonged increased intracranial pressure may do this. Concomitant depression of the floor of the sella is helpful in establishing the intrasellar origin of the lesion but occasionally the pulsating pressure of a blocked third ventricle will be transmitted through the infundibulum to the pituitary, and the findings may be identical with those of a pituitary adenoma. Craniopharyngiomas are prone to simulate intrasellar tumors by their erosion



FIGURE 2

8 year old colored male with large craniopharyngioma. Arrow "A" points to the only visible calcification on the first skull films. The other three arrows point to the calcification of the cyst wall that became visible 6 months after the operation at which an anastomosis between the cyst and the right lateral ventricle was established. There has been no recurrence of symptoms since the operation.

of the clinoid processes, but, in addition to this, 65 per cent will have recognizable flecks or curvilinear deposits of calcium in their walls (Figure 2). These tumors almost invariably are discovered before 20 and pituitary tumors later in life. The sella should be measured, and for accurate measurement the films must be made in the direct lateral projection with a distance of at least 36 inches from the tube to the film to minimize magnification. There are frequently cases in which the sella is borderline in size, and without bone erosion we must be careful in evaluation of such films. Decalcification of the sella without erosion is also a finding to be used with caution. The dorsum sellae participates in the decalcification of senile osteoporosis and in various forms of osteomalacia. The decalcification may be more pronounced in the dorsum sellae than in the other bones of the skull and lead to the erroneous impression of increased pressure on the dorsum.

Localized erosion of bone is not so often seen in the other areas of the skull but is quite helpful when found. Lesions of the cerebello-pontine angle, particularly acoustic neuromas, have a tendency to erode the petrous ridge on the same side. Mere asymmetry of the petrous ridges is not enough. This is too often present in normal individuals. To be sure of pathological significance we must see eroded bone.

Any slow growing tumor may produce localized erosion or atrophy in adjacent bone. Meningiomas are renowned for producing new bone by invasion of bone and elevation of the periosteum. The new bone may be dense or it may be laid down in spicules, resembling the changes of Cooley's anemia and

sicklemia, but they are localized. Actually this is not nearly so common as decalcification and erosion of the involved bone. Localized thinning of a bone of the cranial vault need not be due to intracranial tumor. In one of our recent cases there was localized thinning of one of the parietal bones. There was no evidence of old injury to the bone and we had no such history. We assumed the thinning to be due to an underlying tumor, but at operation an old hematoma was found at this point. On another occasion a young man had clinical signs of cerebellar tumor. Plain films showed a well defined, limited area of thinning in the occipital bone. The appearance was typical of cholesteatoma (more properly called epidermoid) of the skull. At operation no underlying tumor could be found and sections of the abnormal bone showed no microscopic pathology. Our assumption is that we were dealing with an old area of fibrous dysplasia.

There are two lesions of the skull referred to as cholesteatomas, and both produce bone erosion. They are often confused. The above mentioned type is due to an embryonic inclusion of epidermoid cells in the skull itself, in the dura or brain. It is a benign tumor but slowly expansile. When it arises between the diploe it erodes both tables, but generally unevenly. In the dura or brain it produces a pressure erosion of adjacent bone. These lesions may be removed surgically, but the entire wall must be removed or the tumor will recur. The possibility of extension into the brain makes a careful search for such extension necessary. The second type occurs in the mastoid antrum or attic following mastoiditis, and is due to extension of epithelial cells from the ear into the mastoid. It forms a cystic lesion which often slowly increases in size.

Dermoids of the brain are rare but sometimes occur and form smooth edged defects of the skull.

While not true intracranial tumors, the nasopharyngeal transitional cell carcinomas must be considered when eroded bone is encountered in the floor of the middle fossa. These tumors arise in the nasopharynx and generally metastasize to the cervical nodes before the primary lesion is suspected. There was recently referred a case for therapy that had eroded through the sphenoid and produced symptoms of an intracranial tumor. Although its true nature had been suspected, no tumor was found on examination of the naso-pharynx and diagnosis was not established until biopsy of the intracranial extension was performed. These tumors are radio-sensitive, but in this instance we were able to provide only minor temporary palliation.

BONE PROLIFERATION

While, as previously mentioned, meningiomas may cause bone proliferation, localized thickening of the cranium is most often due to osteomas or a benign hyperostosis referred to as metabolic craniopathy. Osteomas, although benign, are sometimes extensive.

It is not uncommon to see them involving the frontal bone and all of the sinuses on one side, grotesquely disfiguring the skull and face. These lesions do not involve the inner table of the skull, although many projections of the skull may be necessary to show that this table is intact. Metabolic craniopathy, on the other hand, involves only the diploe or the inner table of the skull. It is generally found in females and associated with obesity, headaches and some mental deterioration. The common location is on either side of the midline of the frontal bone where it is called hyperostosis frontalis interna. We have not infrequently found this lesion in young and middle-aged individuals, but then it has been associated with well defined glandular dysfunction. Our most recent young person with this finding was a 30 year old achondroplastic dwarf. An exception was a 50 year old white female with headaches and left sided weakness. Her skull films showed multiple areas of internal hyperostosis. The largest lay over the central gyrus on the right and projected into the cranial cavity for 1.5 centimeters. This was removed and found to be compressing the rolandic vein. Since operation there has been complete relief of symptoms. The importance of metabolic craniopathy is hard to gauge. Too often we see it in skull films obtained for fracture and there are no symptoms referable to it. Only in rare instances, such as the above mentioned case, is surgical correction justified.

CALCIFICATION IN TUMOR

Calcification in a neoplasm is the most important roentgen finding, but it is present in only 10 to 15 per cent of the cases. It localizes the lesion and, in addition, the distribution of the calcium may indicate the type. Of the gliomas, oligodendrogliomas calcify most frequently but they are not so common as astrocytomas which also have a tendency to calcify (Figure 3 and 4). Both of these tumors are slow growing and apt to be quite large when discovered. Calcification is scattered over a large area and arranged in irregular linear deposits associated with granules and nodules of calcium. Of some aid in differentiation, the astrocytoma is generally present in the cerebellum in childhood and in the cerebrum in young adults. The oligodendroglioma is a tumor of 40 or over. It rarely undergoes cystic degeneration, a common occurrence in astrocytomas. If curvilinear strands of calcium are present, they indicate cyst formation.

Ependymomas are found in the ventricular system of children and approximately one-fourth to one-half contain calcium. The calcium is in multiple small granular masses, resembling closely that seen in meningiomas, but the latter are almost never encountered in adolescents and are always on the brain surface. A not uncommon location of meningiomas is between the cerebral hemispheres, and here there is true calcification of the tumor, and not stimulation of bone formation by the periosteum.

Pinealomas are often diagnosed by an unusually



FIGURES 3A AND 3B

These figures show massive calcification in an astrocytoma which involves all of the right parietal lobe. There is bulging of the right parietal bone and irregular thinning of the bone due to pressure and enlargement of the sella turcica.

large calcification of the pineal. The borderline between the physiological calcification of the pineal and calcification of neoplastic size is sometimes troublesome to define.

Glioblastoma multiforme is a rapidly infiltrating tumor of the cerebral hemispheres seen almost exclusively in adults. Medulloblastomas occur in the cerebella of children. Both of these tumors are rapidly progressive and neither is likely to contain calcium.

The calcifications of the craniopharyngiomas have been mentioned previously.

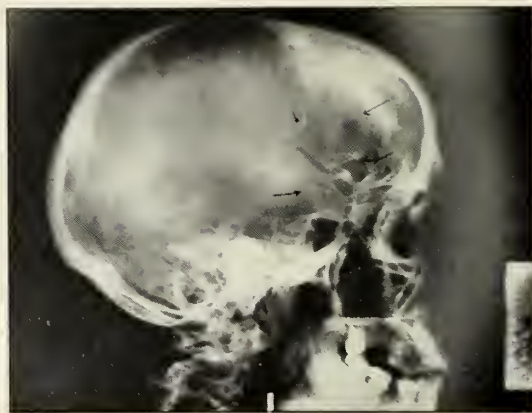


FIGURE 4

43 year old white male with irregular streaky areas of calcification of the left frontal lobe. The tumor measured 8 x 10 cm. in diameters and microscopically was a mixed astrocytoma and spongioblastoma. Other films showed decalcification of the right frontal bone, the lesser wing of the sphenoid and the anterior right clinoid process.

BENIGN CALCIFICATIONS

Calcification in the cerebral cortex is commonly present in association with capillary angiomas but is not often seen with arterio-venous aneurysms. The calcium is in the cortex, not in the walls of the angiomatous vessels, and is secondary to atrophy. It is superficial in location, wavy and tortuous, following the convolutions of the brain. When there are also facial angiomas, the syndrome is referred to as Sturge-Weber, and when with retinal angiomas and possibly angiomas of the abdominal viscera as the von Hippel-Lindau syndrome. The value in finding these associated angiomas is in confirming an otherwise tentative diagnosis of cortical angioma.

Another rare syndrome is Pringle's disease. It consists of tuberosc sclerosis of the brain with fine granular and cortical and possibly heavier subcortical nodules of calcium, associated with adenoma sebaceum. Six months ago we saw skull films of a young white female that showed a very fine cortical or dural calcification distributed over a wide area. The presence of adenoma sebaceum and the history of convulsive seizures with mental deterioration gave us a presumptive diagnosis of Pringle's disease. Calcifications are infrequently seen in brain abscesses, but are not at all uncommon in tuberculomas. The calcium may be present in large flocculent masses in the latter, and several such areas may be visible. If several widely scattered areas of calcification are present it is most likely that they are not due to tumor. The calcifications of toxoplasmosis are smaller than tuberculomas, but they are indistinguishable from them. Hypoparathyroidism occasionally produces calcification in the basal ganglia. Fortunately these are symmetrical. They

increase with prolongation of the disease. The larger cerebral vessels may be calcified in hyperparathyroidism, but are easily recognizable.

PHYSIOLOGICAL CALCIFICATIONS

Physiological calcifications are valuable in indicating the presence of intracranial tumors and should not be abused by being erroneously diagnosed as calcified neoplasms. The most common mistakes are failure to recognize calcifications of the choroid plexuses and the petro-clinoid ligaments as such. While the vascular choroid plexuses extend throughout the ventricles, the most likely point of calcium deposition is the glomus of the plexus of the lateral ventricle at the junction of the posterior and inferior horns with the body. This lies 2.5 centimeters from the midline and is superimposed, or nearly so, on the pineal in the lateral films. While in the average normal skull with demonstrable calcium in the choroid plexuses these areas will be symmetrical, they need not be so, and asymmetry cannot be used as evidence of the presence of a tumor when there are no supporting findings.

The position of the pineal is valuable and must be noted in all films in which it is visible. In PA and AP films it should not be more than 4 millimeters from the midline, even in films that are poorly centered with slight rotation of the skull. If the pineal is out of position, it may be due to displacement of the opposite side by a space filling lesion, or to the side of the lesion in cases of brain atrophy or necrosis. Several methods have been devised to determine abnormal position of the pineal in the lateral films. Vastine and Kinney charts, or Fray markers are necessary for this, and a shift in this plane is evaluated in the same way as the deviation from the midline.

CONTRAST STUDIES

When the plain films are inconclusive, it is the duty of the neurologist or neurosurgeon to determine the advisability of air studies or cerebral angiograms.

Properly done air studies are not dangerous but do cause considerable discomfort. Ventriculography must be done when there is increased intracranial pressure. If air is injected in the lumbar area when there is increased intracranial pressure fatal herniation of the brain into the foramen magnum may occur. When safe we prefer encephalograms as generally they outline the subarachnoid spaces, and cortical lesions may be demonstrated. When there is any doubt as to the location of the tumor, pre-operative air studies should be done. Space does not permit discussion of the various findings in air studies, but the presence of a tumor can be demonstrated in 50 per cent of those cases in which the skull films were negative (Figure 5).

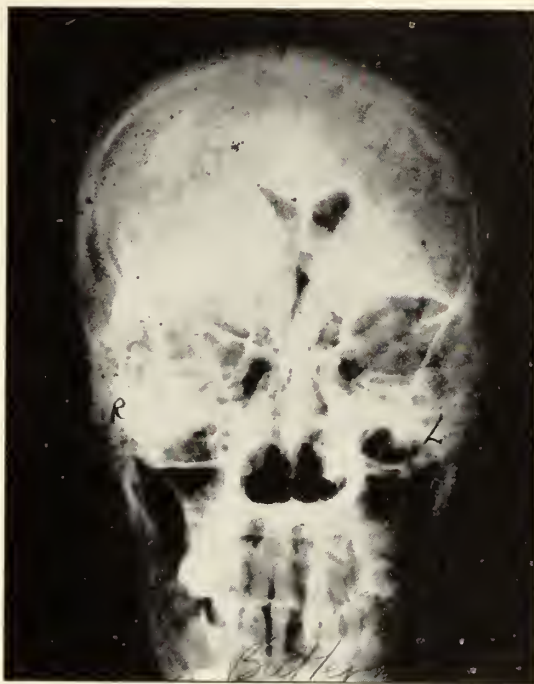


FIGURE 5

44 year old colored male whose plain skull films were negative. The encephalograms show a shift of the lateral ventricles to the left, no subarachnoid markings on the right over the frontal and parietal lobes, and no visualization of a right temporal horn, indicating a tumor in the inferior portion of the right frontal lobe.

Another special procedure that has been slowly gaining approval during the past ten years is angiography. A radio-opaque material, preferably 35 per cent diodrast, is injected rapidly into the internal carotid artery on the suspected side, or into the common carotid artery with the needle pointed to the internal carotid artery. Serial films are exposed in quick succession to record the arteries, capillaries and veins as they are filled with diodrast. If higher concentrations of diodrast or neo-iopax are used fatal brain edema may occur. This method is generally reserved for those cases in which plain films and pneumography fail to demonstrate the lesion. It is of utmost value in arterio-venous fistula and in other vascular lesions, but must be used with caution following hemorrhage or embolism. Arteriovenous aneurysms are well visualized by this method as these vessels offer the course of least resistance to the flow of the blood and the opaque medium. Some tumors have characteristic vascular patterns while others manifest themselves by displacement of the vessels.

The Journal of the South Carolina Medical Association

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Florence, S. C.

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GOING FORWARD

The need for aggressive and progressive leadership in the medical profession is a continuing one, and we are confident that such leadership will be ours in the coming year.

Dr. J. D. Guess of Greenville will soon be assuming the presidency of our Association and working with him will be the officers and Council. The opportunity for service in our own state and for participation in national affairs is unparalleled and we believe that Dr. Guess and his colleagues will not be found wanting in their efforts to meet this challenge.

Dr. John Cline of San Francisco will soon be installed as president of the American Medical Association. Dr. Cline visited South Carolina a few weeks ago and in his public addresses at Florence, Columbia, and Greenville, and in his private conversation with many physicians left the impression of being one who could well stand at the helm of our national organization.

But leadership itself, fine though it may be, is of little avail unless those of us in the ranks give wholehearted support. Our Association has a blueprint for the future, our own Ten Point Program, and it is around the objectives of this program that we must rally our efforts. Cooperation with others, making medical care better and available to all, working out some satisfactory plan for the care of the indigent, encouraging the wide-spread use of pre-paid hospital and sickness insurance, educating the public in affairs medical, preventing the political control of medicine—these are the goals of our Association. But they must also become the goal of each and every member of the Association. Then and only then will we have achieved the purposes for which our organization was perfected over a century ago.

PREMATURITY

Although we have cause to be thankful and proud that the infant mortality rate in South Carolina has dropped precipitately during the past decade, there is

one field of infant care in which there is still much to be done. We refer to the premature baby.

According to a study recently made by the Division of Maternal and Child Health of the State Board of Health, there were 2,304 infants who died in S. C. last year before reaching the age of one year. Of this number 706 or 28.6% had the cause of death listed as prematurity. And of these 706, 354 died within the first twenty four hours of life and 232 more failed to live to the age of one week.

One would be a fool to say that all of these babies could have been saved with the best of medical care, but one would be within the realms of reason to say that a goodly number could have survived if they had had adequate medical attention.

If our profession is to make its contribution toward the lowering of premature deaths, two things must be done. First, all of our hospitals must be prepared to provide the care which premature babies need—good incubators, isolation from infection, and nurses who are especially trained in the care of these little babies. Second, all physicians who are likely to deal with these infants, pediatricians and general practitioners alike, must acquaint themselves with the newer knowledge in premature care. Hospitals and physicians must both realize that the day has long since passed when any type of incubator and a medicine dropper of milk are all that are needed for the adequate care of a premature baby.

Let it be said that some of our hospitals are providing the essentials and that many physicians are employing the newest methods of care. But there are still hospitals and physicians whose facilities and work leave much to be desired.

The Division of Maternal and Child Health has taken full cognizance of the situation and has not only secured incubators in various counties which are available to physicians but has also trained many of the public health nurses in the care of these little babies. Physicians should not hesitate to call for help from the Board of Health when the need arises.

The problem of the premature baby constitutes one

of our greatest challenges, but the combined efforts of the physician, the hospital and the public health department can do much to meet this challenge.

APPRECIATION

As retiring President of the Woman's Auxiliary to the South Carolina Medical Association, I extend to the South Carolina Medical Association the appreciation of our officers and members for your splendid cooperation, your inspiring interest, and your generous financial support. It has been a privilege to work with your President, Dr. W. R. Tuten, and to feel that we have his confidence and respect. We realize that any worthwhile achievements that our Auxiliary may have made have their tap roots in the ideals of your organization and have been fostered and nurtured by your cooperation and interest.

To our Advisory Council: Dr. T. A. Pitts, Dr. W. W. King, Dr. F. E. Kredel, Dr. R. L. Crawford, Dr. G. H. Bunch and Mr. M. L. Meadors, go our thanks for their able assistance in evaluating our program and in strengthening the fiber of our organization. We acknowledge with gratitude the valuable counsel of Dr. T. A. Pitts, Chairman, who has been most helpful in the advance planning by the Executive Board of the Woman's Auxiliary.

We are especially grateful to those who have afforded us channels of communication: to Mr. M. L. Meadors for his excellent work on the quarterly Auxiliary Bulletin, our official organ of auxiliary contact; and to Dr. Julian P. Price for the valuable space allotted us in the Journal of the South Carolina Medical Association. We are also indebted to Dr. N. B. Heyward, Secretary to the South Carolina Medical Association, for his sound advice and requested information. I would also like to take this opportunity to thank Dr. O. B. Mayer, Chairman of Council of the South Carolina Medical Association, for permitting representation from our State Auxiliary to appear annually at your meeting of Council.

Allow me to congratulate you on the choice of Dr. J. Decherd Guess as your incoming president. From past experience we know that the Woman's Auxiliary will find in him an interested co-worker.

Mrs. Alfred F. Burnside, Pres.
Woman's Auxiliary to the S. C.
Medical Association.

CONFERENCE ON RURAL HEALTH OF THE A. M. A.

The Sixth Annual Conference on Rural Health of the American Medical Association was held in the Peabody Hotel, Memphis, Tennessee, February 23-24, 1951. It was preceded by a meeting of the National and State Committees on Rural Health of the A. M. A. on February 22nd. It was my privilege to attend the

sessions of both meetings and to participate in the discussion. This was in connection with the Committee Meetings.

To report adequately on these meetings, I should like to include the entire text of most of the addresses and stenographic transcripts of the discussions; since this would necessarily require many pages of transcript, I shall confine myself to mentioning what I considered the most important and interesting features of the program.

"Sparkplugging Rural Health" was the theme of the National and State Committees' morning session February 22nd, and the principal speakers were Dr. F. S. Crockett, Chairman of the Committee on Rural Health of the A. M. A., and Aubrey D. Yates, Field Director, Committee on Rural Health, A. M. A. Their remarks were followed with the greatest interest.

Reassembling after luncheon, Dr. E. K. Yantes, of Wilmington, Ohio, reported on the "Medical Aspects of the Clinton County, Ohio, Survey."

"Problems of Providing Hospital Accommodations in Rural Areas" was next on the program, the speakers being Doctors W. A. Wuse, Ontario, Oregon; W. A. Weight of Williston, North Dakota; and Allen T. Stewart, Lubbock, Texas. In the discussions, afterward, I offered a few remarks—based on my 55 years of medical practice in a small town, rural area, which will be presented in a separate report.

The general sessions on the morning of February 23, got off to a flying start, with talks by Dr. Crockett, the dynamo of this and all other of the conferences, and Mr. Yates. Mrs. Shelby Carr of Richmond, Kentucky, described how her County Council had been organized, and Dr. Yates told what the Clinton County, Ohio, County Council had done and was doing. H. E. Slusher, Chairman of the Health Committee, American Farm Bureau Federation, Jeffersonville, Missouri, dwelt upon the work of the State Health Council.

In the afternoon gathering Paul A. Miller, Extension Specialist of the Michigan State College at East Lansing, presented a progress report on a National Study of Community Health Action—sponsored by the Farm Foundation of Chicago, and conducted by the Social Research Service of Michigan State College.

Aspects of rural health from a variety of angles found the local physician, the county agent, county farm bureau president, the state grange representative, the home demonstration agent, the local health nurse, the milk producers, and the parent-teachers association, each contributing their views. This was a most interesting and illuminating feature.

At the evening session, we heard two notable addresses—Dr. Haven Emerson, member of the Board of Health of the City of New York, and Professor Emeritus of Public Health at Columbia University, who used as his subject, "Public Health and Medical Care for the Community and the Individual." "Let's Try The American Way" was the theme of the speech

delivered by Mrs. Charles W. Sewell, Administrative Director of the American Farm Bureau Federation, Chicago.

Both of these addresses well repaid our close attention and I regret that the entire text of both cannot be included in this report. I am sure copies can be obtained through the office of the A. M. A. in Chicago, and of all of the talks, and I strongly advise that any physician concerned with rural practice, read them carefully.

The morning session of February 24, had for its theme "Following Through Back Home." Statements were made by leaders of represented groups on what this conference meant to them, and what can be accomplished at the community level. The speakers included Herschel Newson, Master of the National Grange, Washington, D. C.; L. J. Hetch, President, Tennessee Farm Bureau Federation, Columbia, Tennessee; H. C. Sanders, Director of Extension Service, University of Louisiana, Baton Rouge; Dr. Allen T. Stewart, Regional Director, Committee on Rural Health, Lubbock, Texas; Dr. Felix Underwood, Mississippi State Board of Health, Jackson; Eugene Butler, Editor, *Progressive Farmer*, Dallas, Texas; Mrs. Arthur A. Herold, President, Women's Auxiliary to the American Medical Association, Shreveport, Louisiana; and Dr. Thomas C. Shaffer, Department of Pediatrics, Ohio State University, Columbus.

In the closing session that afternoon, we had the following speakers: Dr. Dean S. Luce, Canton, Massachusetts, voted the General Practitioner of the year; Dr. Elmer T. Henderson of Louisville, Kentucky, President of the American Medical Association;

and a particularly stimulating address by Ed Lipscomb, Director of Public Relations, National Cotton Council, Memphis, Tennessee. Mr. Lipscomb is a nationally known figure in the field of public relations and his views on bringing about a better understanding of health problems of laymen, proved to be highly worth while—very witty and entertaining.

In concluding this report, I should like to make a comment on our meeting place—The Peabody Hotel in Memphis. It is one of the leading hotels of the land, and ranks with the best in such metropolitan centers as New York and Chicago. Everything possible was done to make our stay pleasant. Memphis is a wonderful city on the banks of the great Mississippi River. The college is also located there and my friend, Dr. Preacher, who accompanied me there, naturally, as a medical student, knew all about it—where to go to see the various points of interest, etc., as you can well imagine!

Those in charge of the program deserve praise for the way in which the sessions were conducted. Although the conference involved many speakers and close timing, the whole affair moved smoothly along at all times. I am very glad I was able to attend, and wish to express my thanks for the honor conferred.

Finally, I wish to congratulate Dr. Ben Wyman, his associates, the state laboratory, and our County Health Departments for the splendid work they are doing toward the improvement of the health of our people — especially in the prevention of contagious and infectious diseases.

A. W. Browning, M. D.
Ellore, S. C.

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

COMPULSORY HEALTH INSURANCE OR SOCIALIZED MEDICINE

Albert J. Robinson, M. D.*

The cost of medical care is a problem in which the American people, American medicine and voluntary insurance plans have a vital interest. Numerous bills have been prepared by our Administration in Washington, hoping that the House and Senate will act favorably on some form of national compulsory health insurance or socialized medicine. I certainly do not pretend to know them all. I doubt if even our own senators know the details of all of them. However, the bill being sponsored by President Truman and Federal Security Administrator, Oscar Ewing, will

contemplate a payroll tax of 1.5 per cent on all earnings up to the first \$4,800. This tax deduction would be matched by a like contribution from employers to finance hospital and medical care. In addition, the bill calls for another 0.5 per cent of salary from each source to finance dental and nursing care.

A National Health Insurance Board would be set up to run the program. The Board would allocate the money collected through payroll taxes to state agencies. Doctors, nurses, dentists, and hospitals would enter into agreements with the state agencies for payment by various methods. There would be no payment directly by the public to doctors or hospitals.

The Truman-Ewing program is being expertly propagandized by the Security Administrator, and the taxpayers are paying the cost of the selling campaign. Arrayed against the proposal are the American Medical Association and a variety of allies, in-

*Connecticut State Medical Journal, March, 1951. The author is Vice-President of Connecticut General Life Insurance Company.

cluding the major veterans' organizations, the American Farm Bureau Association, public health officers, the National Grange, the American Bar Association and a variety of other groups, including voluntary insurance plans. In the New York Times on Sunday, April 2, Mr. Ewing, in a speech before the National Association of Retail Druggists, pointed out that compulsory health insurance would mean "more dollars in your cash register." Notwithstanding this, the National Association of Retail Druggists are opposed to compulsory health insurance. These groups believe that the best answer to the cost of medical care in the United States is through voluntary provision for the costs of illness.

Outside the Government, the principal supporters of socialized medicine and compulsory health measures are the leaders of certain labor organizations. So far there is no indication that the rank and file of these organizations are sufficiently informed on the implications of the plan to entertain more than a vague notion that if medical and hospital care could be obtained "for free" it sounds good.

Let us examine why this proposal has come before the Congress and the people. Why is it being proposed by the President and Mr. Ewing? First, there is the element of humanitarianism in the picture. Then there is the element of politics. The Administration understandably hopes it will have a popular issue here and that their stand will gather votes for them in the future. And then there is the element of power. We have watched the growth of bureaucratic empires in the Government and we know something about their cost and efficiency. If this plan should go through, Mr. Ewing and his successors will hold prime power over one of the most vital aspects of American life.

Let's take a look at the arguments Mr. Ewing or one of his advisers might place before a Senate committee conducting hearing on this issue.

1. DRAFT FIGURES—He might start out by stating that the health of this nation, rich as it is, in a deplorable state. As eloquent testimony, he would point to the draft rejection figures of over 33 per cent.

2. AMERICAN MEDICAL ASSOCIATION STATISTICS—He might say that the American Medical Association statistics on the number of people currently covered under voluntary plans against hospitalization, surgical costs, accident and sickness, and medical expenses are inflated, and that its hopes for the future of voluntary plans are far too optimistic.

3. CAN'T AFFORD IT—He might tell the committee that most people can't afford such protection, and that even of those who can, many may not be given an opportunity to avail themselves of it. He would argue that none of these plans offer complete coverage, and practically no protection in chronic illness where benefits are quickly exhausted.

4. CHARITY CARE—This train of thought might lead our advocate to the subject of charity care. To him this is repugnant, because, when charity care is obtained it is not good enough even for the indigent in either the material or psychic sense.

5. COMPULSORY HEALTH INSURANCE AND SOCIALIZED MEDICINE—It would be argued that compulsory health insurance cannot be called socialized medicine. The Government would merely collect money and see that it is properly dispensed. There would be no Governmental interference with the patient's free choice of doctor, no dictation to the medical profession as to where or how it should practice medicine, no heavy hand of bureaucracy on the initiative which stimulates research. The relationship between doctor and patient, often delicate and sometimes vital, would be preserved. Government would simply control the purse.

6. SOCIALIZED MEDICINE IN OTHER COUNTRIES—Although our spokesman says he is not proposing socialized medicine, he would point to other countries, including Britain and Germany, which have adopted socialized schemes. He would say that the system seems to be working all right in these countries, and if so many nations have turned to socialized medicine why should we think we're exempt from a march along the same road? To be sure, doctors, nurses and hospitals are overtaxed in these places by the rush to take advantage of their services. If overtaxed, so the argument runs, it is Government's business to see that more facilities, both human and material, are provided.

7. COST—"As for cost, gentlemen of the committee, it will run only about \$5,600,000,000 a year, plus an unspecified extra amount to care for the indigent and to provide for new hospital, laboratory, and research center construction. This is the sum figured by Government actuarial experts."

o o o o o

What is the other side of the picture; the case which many of us think counterbalances the arguments previously outlined? Let us examine these statements, point by point.

1. DRAFT FIGURES—As for draft statistics, any casual analysis will show that a majority of rejections were occasioned by factors on which improved medical care would have had no effect—factors such as illiteracy, subnormal mentality, defective personality, and various disease conditions which medical science has not yet learned to prevent or cure.

We fail to see that the nation's health is in a deplorable state. The doubling of life expectancy since the turn of the century, the markedly lowered mortality figures for all the preventable and curable diseases, do not substantiate pessimistic claims.

2. AMERICAN MEDICAL ASSOCIATION STATISTICS—It is difficult to see how figures on the

number of people now covered by voluntary plans can be very much inflated, or how, at this time, hopes for the future of such plans can be called "over-enthusiastic." After all, the statistics of Blue Cross, Blue Shield, and private insurance carriers are a matter of record and they show that at least sixty million people have some coverage. The rate of expansion is tremendous. Currently voluntary plans are adding people at the rate of 8,000,000 per year. There is every reason to feel that with proper education of the public an even greater majority of the population will be enrolled under one of the various plans within the next few years.

3. CAN'T AFFORD IT—Through mutual cooperation and concession by both the medical profession and insurance carriers, progress is constantly being made in broadening benefits and seeing to it that more complete coverage is offered. Any family that can afford a pack of cigarettes a day or a weekly movie can afford to purchase protection that will take most of the sting out of the cost of medical care. Should it then be a function of Government to force protection on all of us, at the expense of all of us, to take care of a segment of the population which is too lacking in initiative and foresight to voluntarily do something for themselves?

4. CHARITY CARE—It seems to me that, for the totally indigent and the chronically ill, Government may have to assume responsibility free from the stigma of charity, preferably at a state level. However, this is a far cry from universal inclusion of the whole populace in a Federal Government plan. It is also recognized that Government has a necessary place in financing new hospital construction. It should be encouraged also to continue and to expand its public health work. These are problems where governmental participation is necessary.

5. COMPULSORY HEALTH INSURANCE AND SOCIALIZED MEDICINE — Theoretically, compulsory health insurance is not socialized medicine. However, bureaucratic forces, once entrenched, never voluntarily recede. As surely as day follows night, dependence of the medical profession on the funds collected and disbursed by the State would, in a short time, lead to full subjugation. New directives would soon flow from Washington which would make it necessary for every doctor, in the interest of his own economic self-preservation, to restrict his activities to a definite panel of patients, and for patients in turn to consult only one particular doctor. Freedom of choice would soon be lost and medicine on the assembly line would be with us.

There are many people, who, although perfectly healthy, love to talk to a doctor about imaginary complaints; and if they can get a shot of the newest medicine or can boast to their friends about how "the doctor x-rayed me from top to bottom," so much the better. Once open the floodgates to 150 million people, there is no limit to the financial burden forced

upon each and every one of us, or to the lowering of quality of medical care given those who really are sick. When the time comes, as it will under compulsory health insurance, when the local Governmental agent can say to the doctor, "Look Doc, this guy's important in this district. You'd better give him his x-rays and basal metabolism test even if they aren't necessary," then we'll have arrived at socialized medicine, which means inferior medicine. Federal control of the purse is the essential first step toward complete control.

6. SOCIALIZED MEDICINE IN OTHER COUNTRIES—The situation in Britain under socialized medicine is not quite as bad as had been pictured in certain more reactionary publications. However, the cost of the first year of operation was double the original estimate. Doctors' offices are crowded with long queues of patients. Many physicians are trying to see fifty or sixty patients in a morning, when much of their time is consumed in filling out government forms. Granted, some people are getting cursory treatment who might have had none before; many others are receiving a brand of medical care much inferior to what would have been dispensed two years ago.

7. COST—Most insurance actuaries who have studied the problem feel that the Government's estimate of \$5,600,000,000 is much too low. In Germany and Britain it has been found that, for every hundred persons insured under socialistic schemes, one employee is needed to administer the plan. This means potentially an additional army of a million and one half Federal employees in this country. This, together with the heavy unnecessary demands by certain segments of the population for medication and services, leads to estimates that the cost to this country might eventually be over \$10,000,000,000 annually. The worker who can afford the payroll tax (plus the increase in general income tax) necessary to cover such a sum could certainly afford to buy voluntary protection.

For example, consider the optimistic estimate of the Fair Dealers that their plan would cost only \$5,600,000,000 a year. That would be \$136 for each family in the country. That sum is almost precisely double the cost of hospitals and surgical coverage under one of the most popular voluntary plans. Our opinion, of course, is that the Administration's estimates of cost are unrealistic; that the cost will be nearer \$10,000,000,000 a year. That means the average family, under the Government medicine program, would be paying more than three times as much as the cost of a voluntary plan.

To sum up then, why should a healthy, progressive America import socialized medicine from a poor, sick Europe? Probably the answer lies in the combination of misguided humanitarianism and a desire for votes and power.

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—Selesnick, S.: *The Treatment of Amebiasis*, Connecticut M. J. 12:946 (Oct.) 1948.

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RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

American medicine and its allies feel that voluntary plans sponsored by nonprofit groups and by private insurance carriers, together with plans initiated by state medical societies working with both profit and nonprofit organizations, can do the job and should be given a fair chance to prove it.

To Comrade Lenin is attributed the following: "Socialized Medicine is the keystone to the Arch of the Socialist State." This should give the American people reason to think twice and maybe a third time, before submitting to compulsory health insurance.

A JOB FOR THE A. M. A.*

For reasons which may have been logical and valid at the time, the American College of Surgeons thirty-five years ago assumed the responsibility for the evaluation and standardization of medical practice in hospitals.

At that time the American Medical Association had but recently established its Council on Medical Education and Hospitals. It would have seemed that the logical body to undertake hospital standardization was this agency of the American Medical Association. But the task was assumed by the American College of Surgeons.

Though some of the reasons for this have been lost in the erosion of history, others will be readily apparent. Modern surgery was then less than fifty years old. The majority of hospitalized patients were surgical cases. The bulk of medical cases was cared for in the patient's home, and only in recent years have beds in medical and obstetric wards exceeded the number in the surgical ward of the typical general hospital. Elevation and standardization of surgical practice was then a crying need.

To its everlasting credit, the American College of Surgeons achieved, through its program in hospital standardization, effective control of surgical practice in hospitals and enormous progress in other phases of hospital administration. Partly as a result of this program, the modern hospital is today an essential adjunct to modern medical and surgical practice. It provides the plant, equipment, and technical personnel demanded by the vast progress and enormous complexity of present-day medicine.

But conditions have changed. Today the internist, the general practitioner, the obstetrician, and all other special groups have interests equal to those of the surgeons in maintaining proper standards and safeguards in the hospital. It is not surprising therefore that the House of Delegates of the American Medical Association has considered within the past ten or fifteen years several proposals that the entire responsibility for the evaluation and standardization of medical practice in hospitals be assumed by its Council on Medical Education and Hospitals. It was argued that this body alone was representative of the entire

profession and that only through such an agency could all interested groups obtain fair consideration of their respective views and principles.

Having expended large sums of its own money on a program that was of importance and value to the entire profession as well as to the public welfare, the American College of Surgeons came to the decision early last spring that the responsibility of financing the program should be assumed by some other more widely representative body. One would have expected at this juncture that the American College of Surgeons would have approached the American Medical Association with the request that it take over the program. Surprisingly enough, the American College of Surgeons entered discussions instead with the American Hospital Association. It was only after several conferences and the consideration of tentative proposals that the American Medical Association entered the discussion.

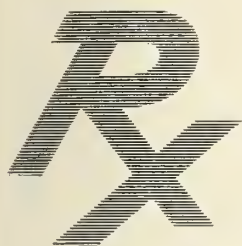
Shortly thereafter, the American Hospital Association House of Delegates enacted a resolution instructing its Board of Trustees to take over the program formerly conducted by the American College of Surgeons. Meanwhile the American College of Surgeons has announced that it will continue with the program until a compromise solution satisfactory to the three interested parties can be effected.

At the December meeting of the House of Delegates of the American Medical Association, the Board of Trustees reported that these discussions were continuing and announced that they revolved about a proposal for the creation of an eighteen-man committee to supervise and direct the program, six members of which would be from the American Medical Association, three from the American Hospital Association, three from the American College of Surgeons, and three from the American College of Physicians.

When hearings were conducted on this report by the reference committee of the House of Delegates, an alternative proposal introduced in a resolution by the Texas delegation was also considered. The latter proposal demanded that the entire program be assumed by the American Medical Association through its Council on Medical Education and Hospitals. It was pointed out that the Council was equipped both with personnel and experience to assume the program and that, indeed, much of its activity in the field of intern and residency approval overlapped the activities presently conducted by the American College of Surgeons. But, for some inexplicable reason, it was stated during the hearings that the American College of Surgeons was unwilling to turn the program over to the American Medical Association.

While it may be granted the American Hospital Association has a legitimate interest in the matter of hospital standardization and that it is entitled to a voice in the conduct of the program, no good reason why the primary responsibility for hospital standard-

*Editorial, GP Journal, March 1951.



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ization should not be vested in the Council on Medical Education and Hospitals has as yet been advanced.

Undoubtedly this question will be reconsidered when the House of Delegates meets again in Atlantic City next June. Meanwhile members of the American Medical Association may well ponder the merit of the two alternatives considered at the December meeting. The American Medical Association is the only organization representative of the entire medical profession in America. Why should it not assume the sole authority and responsibility for the evaluation and standardization of hospital medical practice? What good reason exists for the creation of a joint committee including representatives not only from the American Medical Association and the American Hospital Association—which, as we said, admittedly has a legitimate interest—but two subsidiary medical organizations?

Should the American Medical Association borrow a card from the shuffled deck of Washington bureaucracy? Why should a super agency be created when the American Medical Association is the logical and proper body to assume this function and is equipped to do it?

NEW BILL ON FEDERAL AID TO MEDICAL EDUCATION*

HR2152 was introduced on January 29, by Mr. Burnside of West Virginia. This new bill is designed to promote the national defense and security by providing for a temporary program to aid in relieving the shortage of physicians and other health personnel. It was referred to the Committee on Interstate and Foreign Commerce.

This bill contains three main divisions: (1) \$150,000,000 in federal funds would be authorized over the next five years as grants for defraying all or part of the cost of construction and equipment of new medical schools (medical schools here means schools of medicine). Single grants are limited to \$150,000,000. Grants made under this section are conditioned upon the school providing admission to out-of-state students. Permission is given to a compact between one or more states to operate a school constructed with federal funds. It is required that within a radius of 30 miles of the proposed school there are, at the time of the grants, facilities containing at least 550 teaching beds. (2) There is authorized \$30,000,000 in federal funds each year for the next 4 years for the purpose of making grants for construction and equipment to assist in the improvement and expansion of existing "health profession schools" ("health profession schools" here means schools of medicine, dentistry, public health, nursing or other schools for the education and training of health personnel, including teaching hospitals and other facilities related

*Connecticut State Medical Journal, March 1951.

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to such schools). Grants under this section shall not be in excess of 30 per cent of the cost of construction and equipment. Those receiving benefits under this section must provide reasonable opportunity for the admission of out-of-state students. (3) Provision is made that if a part of the funds provided under the above two type grants is to be used in the construction of hospital facilities, application first must be made under the Hill-Burton Act and refused for one or more of the following reasons: (a) the project has insufficient or no priority; (b) the project is not included in the state hospital construction program; or (c) funds are not available from the state's regular hospital construction allotment. Grants made under this title are subject to the same matching proportions as under the Hill-Burton Act but will be made from appropriations authorized by this bill and not from the Hill-Burton funds. Construction authorized under this bill would not reduce the unobligated portion of the state's allotment under the Hill-Burton Act.

All three of the above programs would be administered by the Surgeon General of the Public Health Service, under regulations prescribed by the Surgeon General with the approval of the Council. A

"National Council on Professional Health Education" is established, made up of the Surgeon General, the Commissioner of Education, both of the Federal Security Agency, as ex officio members, and eleven others not in the full time employment of the federal government, to be appointed by the President—three members from a panel of nine submitted by the Association of American Medical Colleges; three members from a panel of nine submitted by the American Association of Dental Schools; three members from a panel of nine submitted by the National League of Nursing Education; and two to be appointed from among individuals outstanding in the field of health sciences. In the event either of the three mentioned organizations fails to nominate a panel within 90 days the appointments will be made without their advice. Provisions are designed to restrict federal government supervision and control in respect to personnel, curriculum, instruction, methods of instruction, materials of instruction, or the administration of any educational institution.

†Mr. Burnside, M. C. from West Virginia who introduced the bill under discussion is a brother of Dr. A. F. Burnside of Columbia, S. C.

DEATHS

ROBERT B. TAFT

Dr. Robert B. Taft, 51, eminent roentgenologist, died at his home in Charleston on April 16, 1951.

A native of Charleston, Dr. Taft received his education at the College of Charleston and at the Medical College of the State of S. C. (Class 1923). Following special study at the Universities of Michigan and Vienna, he returned to his native city where he engaged in the practice of roentgenology. Over the years he gained recognition as one of the eminent members of his specialty. On three occasions he received awards for his work from the American Roentgen Society and he was the author of various scientific papers. He gained great publicity through his efforts as a "radium hound," and subsequently described his experiences in a book, "Radium, Lost and Found." In 1949 he was appointed a consultant for the Institute of Nuclear Studies at Oak Ridge. In addition to all of this, he served for a number of years as professor of radiology at the Medical College and carried on an extensive radiological practice.

But Bobby, as he was known to his colleagues, was more than a radiologist and a physician, he was a genial companion and a loyal friend. His boundless energy, his keen sense of humor, his genial personality drew others to him. In his passing the physicians of Charleston and his colleagues throughout the state have lost one of their finest friends.

NEWS ITEMS

Dr. George R. Wilkinson, Dr. Keitt Smith and Dr. John A. Ritchie, all of Greenville, recently attended a meeting of the Tenth District Medical Society at Lake Lure, North Carolina. Dr. Wilkinson presented a paper on "An Approach to the Problem of Amebiasis."

Dr. Robert P. Jeanes, Ophthalmologist, formerly of Easley who was called to active duty with the medical corps of the army in September 1950, was released from duty on March 29, 1951. His release was based on Easley's need for his specialty where he has reopened his offices for practice.

Dr. Walter Ellis Bryant of Hemingway was presented the "Outstanding Citizen for 1950" award by the Junior Chamber of Commerce at a recent Ladies' Night meeting.

Dr. W. A. Woodruff of Spartanburg County has recently been appointed an honorary trustee of the Medical College until 1961. The appointment was made by Governor Byrnes and gives Dr. Woodruff the same powers as other trustees.

Dr. O. Z. Culler of Orangeburg has been elected to the board of trustees of the Orangeburg Hospital.

Dr. T. G. Herbert has returned to Charleston from the Navy and has resumed his association with Dr. Patricia Carter in the practice of obstetrics and gynecology.

The following trustees of the Medical College were unanimously re-elected by the General Assembly recently: Drs. E. H. Barnwell, A. F. Burnside, F. L. Martin and J. M. Pratt.

Dr. Prentiss M. Kinney of Bennettsville, was re-

cently elected President of the Rotary Club of that city.

BIRTH ANNOUNCEMENTS

Dr. and Mrs. David F. Adcock of Columbia have announced the birth of a daughter, February 27, 1951.

Dr. and Mrs. J. E. Hodge of Cheraw, also have a new daughter.

Dr. and Mrs. W. O. Tanner of Columbia, report the birth of a son.

WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. A. F. Burnside, Columbia, S. C.

Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.

PRESIDENT'S MESSAGE

The closing days of the 1950-1951 administration of the Woman's Auxiliary to the South Carolina Medical Association finds your president humbly grateful for the enlightening experiences of the past year. All over the State I have found Auxiliary members warmly receptive to the work of the organization. You have extended to me your friendly hospitality and have shared with me your successes and disappointments. Everywhere I have received encouragement and inspiration by your cooperation and interest. Any achievements that the Woman's Auxiliary may have accomplished this year are due to your enthusiastic efforts.

Your state officers and committee chairmen have given unreservedly of their ideas, their time, and their experience to make the work of the Woman's Auxiliary a substantial contribution to the medical program of the State. We have endeavored to link our program of work with national channels and at the same time, to maintain a program congruous with the needs and aims of the local groups. The splendid cooperation of our District and County Auxiliary presidents, officers, and committee chairmen has extended in scope and intensity the effectiveness of our State Auxiliary work. To all of those who have taken the responsibility for designated work I am especially grateful.

It is with a feeling of security and confidence that we hand the gavel of authority to our President-Elect, Mrs. Kirby D. Shealy. After I have worked so closely and so pleasantly with Mrs. Shealy this year, I can assure you that State Medical Auxiliary work for the coming year rests in capable and conscientious hands. She will furnish able leadership; from you I covet for her the same interest and willing assistance that have so greatly aided me in directing the work of the Woman's Auxiliary for this year. It has been a pleasure to work and plan with Mrs. Shealy, and to her I pledge my continued cooperation.

Year by year, through experience and sincere desire on the part of the women to give practical application to the ideals of medical service, the work of the Woman's Auxiliary has been projected; its concepts of growth and development have been crystallized into sound, workable programs. It is my sincere hope that this administration has left some contribution, some adaptation of principle that will prove foundation material for further growth.

To our President-Elect, Mrs. Shealy, go the responsibility and privilege of interpreting for us and for the public the work of the Woman's Auxiliary to the South Carolina Medical Association. In her behalf, I ask your continued cooperation and support.

Mrs. Alfred F. Burnside, Pres.
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1. Gardner, L. I., Butler, A. M., et al.: *Pediatrics* 5:228, 1950.
2. Nesbit, H. T.: *Texas State J. M.* 38:551, 1943.
3. Dodd, K., and Rapoport, S.: *Am. J. Dis. Children* 78:537, 1949.
4. Recommended Daily Dietary Allowances, Revised 1948, Food and Nutrition Board, National Research Council.

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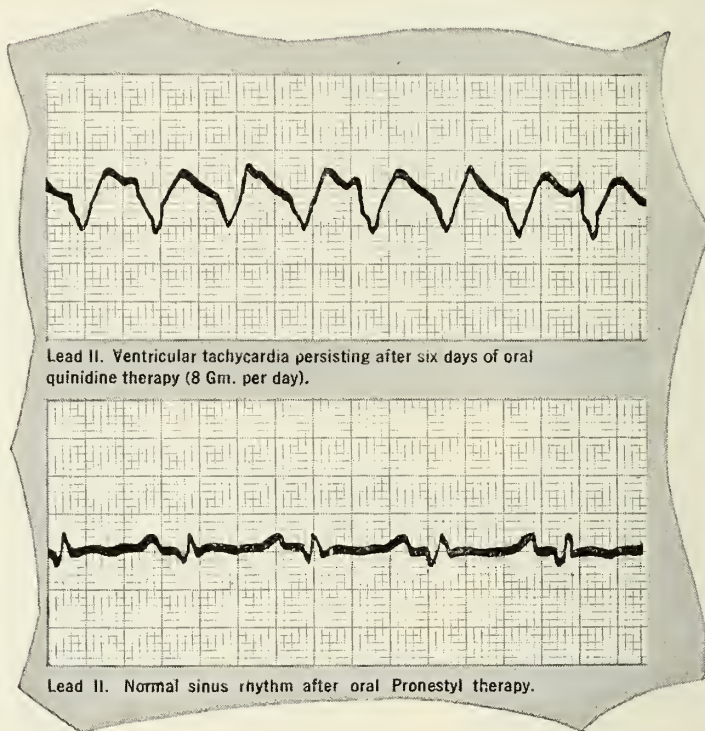
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The Journal of the South Carolina Medical Association

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Anaphylactic Shock From Wasp Stings

W. H. WILLIAMS, JR., M. D.
Rock Hill, S. C.

A review of the literature of the past thirty-five years reveals reports of eight fatalities resulting from bee or wasp stings, twenty-one cases of severe general reactions, and two with generalized urticaria and exfoliative dermatitis. Other cases of severe general reactions are reported in the foreign literature during this period.

As fatal and near-fatal reactions to the extremely common occurrence of bee or wasp sting may be unpredictable, descriptions of physical signs and symptoms encountered, a discussion of the problem, usual treatment, and a suggested new course of immediate treatment are here presented.

Waterhouse¹ reported the case of a fifty-five year old bee-keeper who had been stung frequently, and in June was stung by five or six bees at once, from which he seemed none the worse. On August 6, he was stung on the hand by two bees and almost immediately began to feel a constriction of the throat and intense throbbing of the head. His face was flushed, eyes congested and his upper lip swollen. There was numbness and tingling of both hands and difficulty in breathing. The patient lost consciousness half an hour after the sting; breathing became stertorous, pulse feeble, and for a few seconds the pulse could not be felt. He recovered consciousness in from three to four minutes, but had a milder attack ten minutes later. On September 2, the unfortunate bee-keeper was again stung by a bee on the upper margin of the right ear. Soon he again began to feel constriction of the throat and difficulty in breathing, and later he collapsed. He was semi-conscious, restless, and exhibited sighing respiration. The right side of his face was congested and swollen. Sweating was profuse; the extremities were pale, cold, and clammy. The pulse could not be felt, and the heart sounds were very feeble. The patient improved slowly. Waterhouse assumed this reaction to be anaphylaxis.

In the same year, 1914, two letters in correspondence to *Lancet*² reported fairly severe local and general reactions to bee and wasp stings.

Bevan³ reported a party of three stung by a swarm of bees and, on questionable evidence, assumed the severe reaction to be the result of acidosis. Indeed, it has been a general conception that local and general reactions from stings have been due to formic acid, but Benson and Semenov⁴ have shown that formic acid is not a component of bee or wasp venom.

Powell⁵ and Mackay⁶ each reported cases in which their patients had become sensitized to bee or wasp stings and on subsequent stinging, in addition to exhibiting signs of anaphylaxis, developed urticaria and exfoliative dermatitis.

Von Geldern⁷ described three members of a family who, on being stung by wasps, developed genital itching, numbness of the fingers, diarrhea, abdominal cramps, and wheezing, all accompanied by marked prostration, weakness, and sweating. The attacks usually lasted about a half hour.

Gibb⁸ described a seven-year-old girl who, after being stung by a bee, developed urticaria, sneezing, cough, and moderate flow from the eyes and nose. On insufficient evidence, Gibb attributed this reaction to injection by the bee of pollen to which the child was sensitive. Benson in a microscopic study of bee stingers and observation of the mechanism of the protrusion of the sting shaft, showed that the lancet of the bee is almost entirely free from contamination with pollen.

F. G. Cawston⁹ attributed pains down the back of his patient's legs, which developed in addition to prostration and sweating, to the neurotoxins of bee venom. Langer, quoted by Dyke,¹³ stated that bee venom has three pharmacologic actions: a neurotoxin, an hemolysin, and a factor attacking the endothelium of blood vessels. Benson has shown that the venom contains an indol, probably tryptophan, choline, glycerol, phosphoric acid, palmitic and other fatty acids, and a non-nitrogenous constituent having an action suggesting saponin. The last is the pharmacologically active principle of bee venom. It may be a dermolyisin releasing histamine locally present in the skin.

Fisher¹⁰ reported a bee-keeper's wife who rather

suddenly developed sensitivity to bee stings, and sensitivity was of such magnitude that if another person, who had been stung by a bee on the finger, would rub his finger on her skin she would develop urticarial wheals. It was also noted that if she came near an old discarded hat of her husband's, which contained many stingers, asthmatic symptoms would develop. Fisher was able to desensitize this patient with gradually increasing doses of an extract made from whole bee bodies. This and Lincoln's¹¹ case of a severe general reaction following wasp stings with subsequent relief of chronic arthritis lend support to Benson's theory that reactions are allergic in the human from sensitization to allergens inherent in the bee.

Jex - Blake¹² reports two fatal cases resulting from bee stings. One of his cases is illustrative of the development of sensitivity. A fifty-five-year old man had been stung at least a dozen times a year for the past twenty years without general effect. He was stung on the leg and immediately felt very ill, collapsed in two or three minutes, was unconscious, cyanosed, and pulseless for ten minutes, passed urine and feces, struggled violently on coming to, and twenty minutes later was well enough to drive home in his car. During the next nine months he had ten more similar attacks on being stung; each attack was said to be more severe than the previous one. The next to the last attack followed a sting on the forehead. The patient walked into the house and collapsed in one-half minute. He was cyanosed and pulseless for ten minutes. Two hypodermic injections of strychnine were given and the pulse slowly returned. While still unconscious he passed urine and feces, had a violent rigor and dripped with perspiration. He slept for four or five hours and awoke feeling well. The eleventh attack followed a sting on the neck and proved fatal in fifteen minutes. No autopsy findings are reported in Jex - Blake's cases.

Dyke¹³ reported two fatal cases of wasp stings in which autopsies were performed. In the first, a forty-four-year old man collapsed and died within twenty minutes of the sting. At autopsy there was an excess of clear fluid in the pericardial sac; the lungs were congested and exuded some bloodstained fluid, but there was no other evidence of disease. The second case died within ten to fifteen minutes after being stung, and autopsy findings were reported as "no disease of any organs or any cause of death other than wasp sting." It was reported that the reaction around the site of the sting was either slight or absent. This is in agreement with Obermayer¹⁴ who, from his own experience, noted absence of pronounced local reaction with the occurrence of severe systemic reactions. It may be assumed that the absence of severe local reaction is due to a measure of vasomotor collapse.

Wegelin¹⁵ reports three fatal cases, two from single stings of bees and one from a single wasp sting. Death occurred within the first hour in two cases and within

five days in the other. The latter case developed extensive lobular pneumonia following the initial unconsciousness, and coma persisted until death. The pattern of rapid development of nausea, cyanosis, vertigo, vomiting, pallor, sweating, shock, and coma developed in the three patients. Necropsy revealed hyperemia of the internal organs, edema of the lungs and pharynx, petechial hemorrhages of the skin and mucosa and occasionally of serosa, meninges, and brain. There was also emphysema of the lungs. The first-mentioned changes suggested severe damage to the capillary walls while the pulmonary emphysema was suggestive of an allergic reaction. Though it seems that Wegelin would have two factors causing the pathological changes, it has been shown that hypersensitivity reactions and anaphylaxis may, in themselves, produce such vascular changes^{16, 17, 18, 19, 20, 21}. In 1919 Arthus, quoted by Dykes, injected bee venom intravenously into dogs, producing a full picture of anaphylaxis as seen in that animal, and autopsy of the dogs showed congestion of the liver, kidneys, and meninges and hemorrhagic and serous effusion.

Hobson²² has the most complete available report of autopsy findings in the fatal case of a seven-year-old boy who died within not more than twenty minutes from the time of being stung by from thirty to fifty wasps. The family history in this case was interesting in that the mother of the child was stung by a honey-bee several years before the child was born and soon "swelled all over, her lips being so swollen that they turned wrong side out." Following this she developed a generalized urticaria which lasted two days. The boy was dead on arrival at the hospital; the body was cyanosed and showed no local evidence of stings. Autopsy showed a few purpuric spots on the back, but no edema or evidence of inflammation of the skin. The stomach mucosa showed numerous petechial hemorrhages; also the duodenum, jejunum, ileum, and colon presented hemorrhages in the mucosa. The kidneys were markedly congested. The adrenals were normal. There was no gross hemorrhage in the brain, but section revealed marked engorgement of the vessels in the brain substance. Microscopic examination of the liver showed engorgement of the blood vessels; the liver cord cells showed all stages of degeneration. A similar picture was seen in the spleen, kidneys, and gastrointestinal tract. The anatomical diagnosis was: "1. Parenchymatous degeneration of the liver. 2. Parenchymatous degeneration of the kidneys. 3. Ascites, mild. 4. Engorgement and petechial hemorrhages of the gastrointestinal tract. 5. Engorgement of the splenic sinuses. 6. Congestion of the blood vessels in the brain, kidneys, and liver."

More recent reports of severe reactions to wasp stings are those of Paul and Presley²³ and Helm.²⁴ Paul and Presley gave their patient, who was in profound shock, oxygen, intravenous fluids, Benadryl (R) intravenously, and epinephrine. Their patient developed a profuse, bloody diarrhea on returning to

consciousness, which seems to give clinical support to the pathological findings in the gastrointestinal tract of Hobson's case. They used an antihistaminic agent because of the histamine-like action of bee venom. This has been suggested by others.²⁵

Helm's case showed—in addition to cyanosis, cold, clammy skin, imperceptible radial pulse, absent blood pressure, and rapid, shallow respiration—foaming at the mouth and coarse mucus rales over both lung fields. His patient recovered with external heat, oxygen, adrenalin, and intravenous fluids.

CASE REPORT:

A thirty-seven-year old, six-foot, three-inch, 235-pound painter was admitted to the emergency room of the York County Hospital in profound shock on August 17, 1950. The history as given by the family was that he had been stung on the left hand and forearm by six or seven wasps, following which he returned to the house, complained of "itching all over," became extremely weak and nervous, "frothed at the mouth," and collapsed within fifteen minutes after the stings. Family and past history did not reveal unusual sensitivity to bee or wasp stings.

On admission, the patient was cyanotic; his lips and eyes were swollen; he was covered with perspiration, and his blood pressure could not be obtained or pulsations felt at the wrist. There was frothy material on his lips, and his tongue had been bitten on the right side. There was tachycardia of over one hundred and fifty beats per minute and heart sounds were distant. His lungs were clear. There was inequality of his pupils, and his eyes and head were rotated to the left side. His neck was moderately stiff. Breathing was rapid, shallow, and stertorous, and the general appearance was that of a cerebrovascular accident.

The patient was given one cc. of adrenalin subcutaneously immediately, followed by 50 mgm of Benadryl (R) intravenously. Oxygen by mask was started, followed by intravenous glucose in saline and blood, treatment which caused a slight improvement in that the blood pressure could be obtained at 90/60 after about three hours. He was irrational and violent and had to be restrained as well as given intravenous Sodium Amytal (R) and subcutaneous morphine and scopolamine.

About three hours after admission, the sweating suddenly stopped, and his temperature went to 107° F., axillary. Alcohol sponge baths and more intravenous fluids were given. At one time he became even more violent and hyperventilated for several minutes, at which time his blood pressure went to 170/110, but returned to the previous reading of about 90/80 after a short time. He became cyanotic if the oxygen mask was removed for more than a few minutes, though there was no obstruction to his breathing. His temperature returned to 102.6°, axillary, about six hours after admission. He had voided and passed feces. During the first seven hours he received 4,000 cc of intravenous saline and glucose

and glucose in water, 500 cc. of whole blood, subcutaneous adrenalin and intravenous Benadryl (R). Seven hours after admission, his blood pressure was obtained at 110/70, and he was moved to a hospital bed.

The morning after admission, the urine report was: cloudy, acid reaction, specific gravity 1.005, albumin two-plus, sugar negative, many granular and hyaline casts, 3-5 white cells per high power field, and occasional red cells. The peripheral blood showed a hemoglobin of 14.5 Gm per 100 cc. The white cell count was 15,200 with 74% segmented forms, 24% small lymphocytes, and 2% eosinophils. The blood Kahn was negative.

During the day after admission the temperature ranged between 100° and 103.4°, axillary. There were coarse and high-pitched rales and rhonchi over both lung fields anteriorly, and the patient was started on intravenous Aureomycin (R), 100 mgm every four hours, and penicillin, 100,000 units every three hours. He was also given 50 mgm of Benadryl (R) intravenously every six hours and 1000 cc of 5% glucose in saline alternating with 5% glucose in distilled water every eight hours. Oxygen was continued because the patient became cyanotic within a few minutes after being removed from the tent. He continued to be irrational and violent, requiring restraints and intravenous barbiturates, which did not quiet him sufficiently, so that morphine and scopolamine were given at intervals.

On August 19, 1950, the second day after admission, the patient seemed more rational for short periods, but lapsed into excitement and was irrational and violent. The temperature ranged between 100° and 102°, axillary. Restraints could be released for only very short intervals, and oxygen was required constantly.

The third day after admission, August 20, the temperature again ranged between 100° and 102°, axillary, and the respiratory rate was between 20 and 24; the pulse rate between 94 and 110.

On August 21, four days after admission, the patient was still very restless at intervals, requiring restraints and sedation. Oxygen was continued. The axillary temperature remained between 99° and 101°. The urine on that day showed a trace of albumin, 3-5 white cells per high power field, and rare red blood cells. The white blood count was 13,200 with 26% small lymphocytes, 70% segmented forms, and 4% eosinophils. The NPN of the blood was 23.07 mgm percent, and the icterus index was 30. The sclerae were icteric and the physical findings in the lungs remained those of rhonchi and rales. He had a harsh, non-productive cough and remained irrational and critically ill.

Early in the afternoon of the fourth day Cortisone was started at a dosage of 100 mgm every eight hours for three doses.

On August 22, the patient appeared much improved. His temperature did not go above 100°,

axillary; he was rational, and his chest was much clearer than it had been. Cough, productive of thick mucoid material, increased. The fasting blood sugar was 111 mgm percent. Cortisone was continued at a dosage of 200 mgm daily.

On August 23, the oral temperature ranged between 98.0° and 98.4°, the pulse rate was between 70 and 80, and the respiratory rate was 20. He continued to void involuntarily on occasions. Rales and rhonchi had disappeared from the anterior chest, and cough had increased. He had several loose stools during the day. Two hundred mgm of Cortisone was given on that day. It was possible to discontinue oxygen without distress to the patient, and parenteral medication could be substituted by oral Aureomycin (R) and Benadryl (R).

On August 24, the oral temperature did not go above 98.6°. He began to eat fairly well and could sit up so that the posterior chest could be examined more accurately. Crepitant rales were heard in the posterolateral base on the right with some inspiratory wheezes. Though the patient was rational, he was still slightly hazy mentally—he could not think of names, places, etc. He also complained of numbness of the left side of his face, left leg and foot. The white blood cell count and differential revealed 7,700 cells with 74% segmented forms and 26% lymphocytes. The dosage of Cortisone was reduced to 100 mgm daily.

The patient improved steadily. Cough continued for three days and then gradually abated. He was confused mentally at times, but this gradually improved, as did the numbness of his face and leg. The chest was entirely clear on August 26, and there was no fever. On the 29th Cortisone was reduced to 75 mgm daily and to 50 mgm on the 30th. The drug was discontinued on the 31st, after nine days of treatment. On September 1, he stated that he had voided "fifteen times" during the night.

On September 2, the patient was discharged from the hospital and was seen at weekly intervals for the next three months. On September 11, he had planned to return to work, but complained of feeling "weak and nervous." The day before he had complained of "itching all over," especially the left leg and over his body. He had noted no rash, but stated that his skin "got red" when he scratched. There had been no appreciable change in his diet, and he denied eating any honey.

Physical examination revealed only a slight eiteric tint of the sclerae. His white blood count was 8,300 with 52% segmented forms, 1% large lymphocytes, 39% small lymphocytes, 5% eosinophiles, and 3% monocytes. Benadryl (R) in a dosage of 50 mgm four times a day was prescribed and controlled the itching. Because of recurrence of itching, the drug was continued at intervals for six weeks.

Subsequent visits revealed gradual diminution of subjective symptoms of numbness of the left side of his face and left leg. There was objective evidence

of increasing mental acuity by increased articulate speech and improved memory. Judgment and ability to make decisions improved slowly. At the time of writing, four months after the stinging episode, the patient's associates have stated that he does not have quite the ability to make definite decisions that he had before his illness. The patient has also recently stated that he does not have the energy he once had and has noted definite loss of libido.

COMMENT:

The case here reported showed symptoms and signs of reaction similar to, if not more severe, than those previously reported in patients who recovered. Brann,²⁶ however, had a patient who remained in coma for four days following bee stings.

The mental changes, numbness, sudden hyperpyrexia, and other signs of central nervous system injury were probably the result of petechial hemorrhages in the brain substance and perhaps the hypothalamus. Though cerebral edema associated with urticaria, such as reported by Murrell,²⁷ may have operated alone, it is most likely that both edema and petechial hemorrhages occurred in this case. The icterus demonstrated by this patient was probably from two causes: liver damage, as shown in Hobson's case, as well as extravascular blood destruction following petechial hemorrhages. It is also quite likely that there was pneumonitis, like that described in Dyke's case, and also renal vascular damage in this patient.

It is possible that this patient may have responded more promptly had more adrenalin been given. Determination of the part played by the intravenous antihistaminic agent given to this patient has been impossible, but its use seems to have a rational basis.

The use of barbiturates and morphine in this case undoubtedly had no beneficial effect on the patient's general condition, but it was impossible to control him by any other method.

As one of Wegelin's cases developed an extensive lobular pneumonia, it seems that the use of large doses of antibiotic agents in this patient was justified as a prophylactic, if not therapeutic, measure.

Cortisone was started in this patient on the basis that the pathological changes exhibited in anaphylaxis and serious serum disease are similar to those found in those diseases in which Cortisone has been of benefit.²⁸ Its use in this case seems to bear out the hypothesis that the drug is of most value in those conditions which have hypersensitivity as a common factor.

It is admitted that the patient might have recovered as quickly on the usual treatment with adrenalin, antihistaminic agents, and general supportive therapy, but the rapidity and magnitude of the change in his condition during the first thirty-six hours after the beginning of Cortisone treatment appears to deny this.

A much better point might have been made for Cortisone in this condition had the drug been given

earlier. Better, ACTH, which was not available at the time, would have been of more value because of its more rapid action. ACTH has been used by Stefanini *et al*³¹ in a case of anaphylactoid purpura, and the effect was that of prompt regression of the vasculitic changes and hemorrhagic manifestations seen in that disease, which presents changes not unlike those seen in anaphylaxis from bee or wasp sting.

DESENSITIZATION:

Desensitization as prophylaxis against severe general reactions in the event of subsequent bee or wasp stings has been recommended,^{29, 30} and is to be followed in this case. It is to be emphasized that an aqueous or isotonic saline extract of the entire body of the bee or wasp be given in gradually increasing dosage.

Fisher had his extract prepared by Lederle Laboratories from live bees in the following dilutions: 0.00001 mgm, 0.0001 mgm, and 0.001 mgm N per cubic centimeter. Following a skin test wheal to the 0.001 mgm dilution, Fisher gave his patient 0.1 cc of the 0.001 mgm dilution and gradually increased the dosage at weekly intervals until a dose of 1.0 cc of a 0.01 mgm dilution was reached. This dose was repeated at monthly intervals with successful desensitization.

SUMMARY:

1. A review of the literature on the subject of severe general and fatal reactions due to anaphylaxis from bee and wasp stings is presented.

2. A case of severe general reaction to wasp stings is reported with apparently life-saving results from the administration of Cortisone.

3. The use of adrenalin in adequate doses, antihistaminic agents, and general shock-combating measures is recommended as immediate first aid to be followed by Cortisone or, preferably, ACTH in cases of anaphylaxis.

4. The subsequent desensitization with extracts made from the whole body of the insect is suggested in those patients who react violently to bee or wasp stings.

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Carcinoma Of The Cervical Stump

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Extensive analytical review of cases of carcinoma of the cervix has recently been undertaken in the Pathology Department of the Medical College of the State of South Carolina. During the past 10 years (since January 1, 1940) there have been 925 instances of carcinoma of the cervix. Included in this number were 26 patients who had experienced previous supracervical hysterectomy, an incidence of 2.9%. This figure is no doubt lower than the true incidence because in many cases very little clinical data was submitted. It does not include those cases in which amputation through an unsuspected cancerous cervix has been performed and carcinoma has unquestionably remained in the cervical remnant, but no subsequent biopsies or information is available. We have been able to find a total of 41 cases of neoplastic disease of the cervical stump recorded in our files (Table I). Various authors have found the incidence of cervical stump carcinoma to be from 2% to 8% of the total number of carcinomas seen (Table II). In reviewing the current literature it is obvious that there is still confusion and misinterpretation of statistics as regards this problem. This incidence represents the relationship of cervical stump carcinoma to carcinoma of the cervix in the intact uterus. It is not to be misinterpreted as meaning that 2% to 8% of patients having subtotal removal of the uterus subsequently developed carcinoma of the stump. This is an entirely different relationship. Pearse¹ reported 8 instances of cervical carcinoma (1%) in a group of 810 patients traced 5 or more years after supravaginal hysterectomy. Scheffy² found 5 cases (.9%) among 554 patients. The group of patients developing carcinoma in the stump of the cervix are usually divided into 2 groups. First, true carcinoma of the stump: those which occur in the stump 3 years or more after surgery; second, persistent carcinoma of the stump: those which occur in the stump less than 3 years after removal of the corpus. Different authors^{3, 4, 5} use from 1 to 3 years as the time interval following hysterectomy in formulating standards as to which cases are true carcinomas of the stump. Three years is the most commonly accepted period. The latter group usually presents a mistaken diagnosis. It is likely that the lesion was there at the time of subtotal hysterectomy, but was not detected. This is the group that can be decreased by more adequate evaluation of the cervix if complete uterine removal is not contemplated. In the present series of 41 cases it is very probable that

carcinoma was present in the cervix at the time of operation in 14 of these cases.

The diagnosis of cervical carcinoma in its asymptomatic stage may be extremely difficult even for an experienced gynecologist. Early carcinoma is characterized by histological changes which produce no gross lesion. Symptomatic carcinoma in more advanced stages can be positively diagnosed only by biopsy or cytologic studies. Granuloma venereum or severe cervicitis, particularly in a pregnant woman, may closely mimic carcinoma. Cervices of normal appearance or having mild degrees of cervicitis and erosion may harbor carcinoma.

The diagnosis of cervical carcinoma depends ultimately on pathologic study whether the carcinoma be early or well advanced. No method of palpation or visualization of the cervix will dependably enable one to decide that a patient does or does not have carcinoma.

Diagnostic methods have been perfected in recent years to stimulate interest in the diagnosis of early lesions of the cervix. Hinselman¹² devised a culposcope which permits minute visualization of the portio. This instrument, although valuable, has definite limitations which make its universal use impossible. More generally available is Schiller's¹³ iodine test. This is based on the observation that normal squamous epithelial cells contain glycogen which stains dark brown with iodine. Cancer cells exhibit excessive glycolytic activity and therefore do not take the stain. Experience has shown, however, that this is by no means a specific test for cancer, as certain benign lesions also fail to stain as do areas of erosion and ectropion. Its chief value is probably in indicating to the physician which areas should be biopsied. The exfoliative cellular methods introduced by Papanicolaou and Traut¹⁴ furnish a simple and reliable method of preliminary diagnosis and determination of which cervixes should have additional examination. If the smears or spreads contain cells indicative of neoplastic activity, further investigative and confirmatory studies must be undertaken. Sponge biopsy is another modification of combined cytologic and biopsy technique which provides a simple method of pathological examination. Various types of endocervical curettes also furnish valuable aid in obtaining strips of endocervical mucosa so as to detect those carcinomas which are present within the canal.

It is generally agreed that total hysterectomy is a more difficult operation but should not be attended by a higher mortality rate than the subtotal method. It would be absurd to state dogmatically that every hysterectomy should be a complete or total one. Each

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operator has to individualize his patient, but in the vast majority of patients experiencing hysterectomy a total operation could be done. It must be kept in mind that the cervix is generally accepted as being the second most common site of carcinoma in the female. Evidence is accumulating that in areas having a large Negro population it is the most common. When it is divorced from the uterine corpus there is still an important nidus left for carcinoma. On the Gynecology service of Roper Hospital the total operation is now always done with few exceptions. These exceptions are: the very obese patient, the patient with dense inflammatory adhesions and the patient who is a very poor operative risk. On the Gynecologic Service in 1940 only 5% of hysterectomies were total, whereas in 1949 75% of hysterectomies were complete.

Our plea is not for complete hysterectomy in all cases requiring removal of the uterus. We feel that this decision rests with the individual surgeon. We do wish to vigorously emphasize that the operator should know the status of the cervix prior to any type of hysterectomy. When contemplating a hysterectomy the cervix should be thoroughly examined. The presence of fibromyomata does not eliminate carcinoma of the cervix. On the contrary, many authorities¹⁵ believe that carcinoma of the cervix occurs more frequently in the patient with fibromyomata of the uterus. Likewise nulliparity does not mean that a patient does not have or will always remain free from carcinoma of the cervix. Mere inspection of the cervix is not enough. If the cervix has a normal appearance and the operator is not planning a complete operation, he should at least obtain cervical smears or scrapings to be sure that there is no hidden neoplastic disease. The responsibility does not end here. After the incomplete operation the patient should be followed and the cervix checked at periodic intervals.

If the cervix is eroded or lacerated, it should not be divorced from the uterine corpus by the subtotal method.¹⁶ The patient deserves the complete operation. Many feel that subtotal hysterectomy combined with coning of the cervix from either above or below is adequate. This is not our belief. It is impossible to remove the entire portio vaginalis by this method. Hence carcinoma of the cervix is still a threat.¹⁷ If, for some reason, the complete operation is not done in cases with a suspicious cervix, we advise pre-operative biopsy or cytologic study of the cervix.

It is an accepted fact that the incidence of carcinoma of the cervix is no higher in the stump than carcinoma of the cervix in the intact uterus. The accident to be avoided is the catastrophic one of amputating the corpus through a cancerous cervix or the embarrassing one of discovering a few days or a few months after partial hysterectomy that the patient has cervical cancer. Unsuspected carcinomas of the cervix are not uncommonly found in uteri removed by complete hysterectomy. Certainly knowledge of

this prior to operation would enable the surgeon to render more intelligent and beneficial service to his patient.

SUMMARY

41 cases of cancer of the cervical stump are described and analyzed. In 925 biopsies of cervical carcinoma studied during the last ten years, 26 cases occurred in the cervical stump, an incidence of 2.9%.

Complete hysterectomy should always be performed when feasible.

The cervix should be evaluated by pathologic study before any type of hysterectomy is performed.

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Case and Series No.	Age	Race	Time Post Operative	Symptoms and Duration	Type of Carcinoma
1. 11022-B	31	White	3 yrs.	Vaginal bleeding recently	Epidermoid
2. 13175-B	63	White	12 yrs.	Recent severe hemorrhage	Adenocarcinoma of cervix.
3. 15713-B	?	White	15 yrs.	Considerable hemorrhage	Epidermoid
4. 15963-B	?	White	5 mos.	Growth on cervix. Cervix normal at time of subtotal hysterectomy	Epidermoid
5. 36101	45	?	Stat	Specimen taken after supra-vaginal hysterectomy "External Cervix looks normal.	Epidermoid
6. 77639	44	White	16 yrs.	Vaginal bleeding for 1 month.	Epidermoid
7. 53672	46	White	8 yrs.	Intermittent bleeding for 6 mos.	Epidermoid
8. 95273	43	Negro	3 yrs.	Vaginal bleeding for 14 mos. Cervix said to be normal at time of supra-vaginal hysterectomy.	Epidermoid
9. 102756	38	White	4 yrs.	Vagina! bleeding for few weeks.	Epidermoid
10. 114211	55	White	15 yrs.	Vaginal bleeding 6 weeks.	Epidermoid
11. 119092	47	White	12 yrs.	Vaginal bleeding 3-4 months.	Epidermoid
12. 124604	39	White	?	Erosion of cervix.	Epidermoid
13. 128545	45	Negro	2½ mos.	Bleeding since hysterectomy.	Epidermoid
14. 130234	56	White	11 yrs.	Blood tinged discharge 1½ years.	Epidermoid
15. 132358	48	White	14 yrs.	Metrorrhagia for 8 months.	Epidermoid
16. 138900	62	White	2½ yrs.	Abnormal bleeding.	Epidermoid
17. 140795	43	Negro	1½ yrs.	Vaginal bleeding 4 months.	Epidermoid
18. 140914	?	White	1 mo.	Bleeding since operation.	Epidermoid
19. 141184	73	White	18 yrs.	Vaginal bleeding for 10 days.	Intra-epithelial carcinoma
20. 149851	36	Negro	5 yrs.	Vaginal bleeding 6 months.	Epidermoid
21. 161633	37	Negro	4 yrs.	Bleeding following intercourse.	Epidermoid
22. 165672	43	Negro	4 days	Vaginal bleeding, 2 years.	Epidermoid
23. 177760	44	White	"several years"	Severe bleeding for 1 week.	Epidermoid
24. 180250	38	Negro	8 yrs.	Cervix of suspicious appearance.	Epidermoid
25. 184197	42	White	10 yrs.	Vaginal bleeding several months.	Epidermoid
26. 185472	42	White	9 yrs.	Irregular vaginal spotting for 2 years.	Epidermoid
27. 196051	47	Negro	18 yrs.	Vaginal bleeding for 2 years.	Epidermoid
28. 197681	29	White	1 yr.	Vaginal bleeding.	Endometrial sarcoma
29. 198627	41	White	2 yrs.	Spotting for 1 year.	Epidermoid
30. 199619	54	White	2 yrs.	Spotting for 2 years, bleeding at time of supracervical hysterectomy.	Epidermoid

Case and Series No.	Age	Race	Time Post Operative	Symptoms and Duration	Type of Carcinoma
31. 200036	?	?	10 yrs.	Vaginal bleeding for 3 months.	Epidermoid
32. 201696	54	White	6 yrs.	Vaginal bleeding for 6 weeks.	Epidermoid
33. 201853	61	White	22 yrs.	Polypoid cervical growth.	Epidermoid
34. 202205	65	White	25 yrs.	Vaginal bleeding for 1 year.	Epidermoid
35. 202447	45	Negro	12 yrs.	Postcoital spotting for 3 months.	Epidermoid
36. 204173	52	White	?	Bloody vaginal discharge	Intra epithelial carcinoma
37. 207627	50	White	20 yrs.	Suspicious area on cervix found on routine exam.	Adenocarcinoma of cervix
38. 212752	57	Negro	22 yrs.	Yellowish vaginal discharge for 3 months which became bloodtinged.	Epidermoid
39. 215250	26	Negro	2 yrs.	Lower abdominal pain. Fixed stump with parametrial induration.	Epidermoid
40. 216490	52	White	3 yrs.	Vaginal bleeding.	Adenocarcinoma of cervix.
41. 219540	50	White	3 yrs.		Adenocarcinoma of cervix.

TABLE I
ANALYSIS OF 41 CASES OF NEOPLASTIC DISEASE OF THE
CERVICAL STUMP

Author	Year	No. of Cases of Carcinoma of Cervix		Percent Carcinoma of Stump
Donnelly and ⁶ Bauld	1926- 1948	780	40	5.12
Pearse ¹	1940	620	35	5.6
Black ⁷	1939	234	19	8.1
Meigs ⁸	1936	1218	26	2.5
Ward and ⁴ Sackett	1938	752	56	7.4
Nielson ⁹	1937	420	9	2.0
Scheffey ²	1936	273	10	3.66
Healy and ¹⁰ Arneson	1935	2600	67	2.6
Kretschner ¹¹ and Sprague	1935	1022	18	1.76
Heins and Pratt-Thomas	1950	925	26	2.9

TABLE II
INCIDENCE OF CERVICAL STUMP
CARCINOMA

Office Gynecology

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The subject "Office Gynecology" is far too extensive to be adequately covered in a paper which is, by necessity, as brief as this. It is our desire to present certain aspects of this subject as it relates to the General Practitioner in hopes that more interest may be created in a branch of medicine which constitutes a large portion of the family physician's daily work.

Since more than half of the population is female, and since more females take time to seek medical care, far more than half of the adult patients seen by the average practitioner are women. At least fifty percent of these women have complaints referable to the field of Gynecology. It would therefore seem necessary for the physician to have spent a proportionate amount of his time in training in this field of medicine. Yet in the average medical school only 7.3 percent of the total hours of instruction are devoted to Gynecology,¹ and a great part of these hours are limited to the surgical aspect of the field. Likewise in the average rotating internship, medical or office Gynecology constitutes an extremely small portion (if any at all) of the time spent on a gynecological service. Because of this lack of basic training it is necessary for the physician to obtain his information and formulate his diagnosis and therapy from reference books, staff conferences, medical meetings, and more frequently from the ever handy "detailman."

With time and the proper equipment (which is a small item), the average competent practitioner could take care of at least 75 to 80 percent of the problems that arise in office gynecology. Yet he is caring for a much smaller proportion of patients than this. Why? There are several factors that are responsible for the number of patients being seen by Gynecologists that ordinarily could be taken care of by the General Practitioner. Some of these factors are as follows:

1. Lack of Training in Office Gynecology.

As we have previously mentioned there is a definite lack of instruction in office gynecology in medical schools, internships, and average rotating residency or post graduate course. This lack of knowledge on the part of the conscientious general practitioner leads to more referrals to the specialist.

2. Inadequate Equipment for Proper Diagnosis and Therapy.

The practitioner may feel that he cannot afford the instruments necessary to perform adequate gynecologic diagnosis and treatment. This is a mistaken idea because so little special equipment is needed. There is probably no place in medicine where the organs

involved are so accessible to inspection and palpation.

3. Referrals during War Years.

Everyone knows that there was not a more over-worked person during the war than the active general practitioner. There were never enough hours in a day to allow him to take care of all that was expected of him. During these years (and even yet in some very busy offices) it was a delight to find a patient with some complaint that might justify a referral to a specialist in order to lighten the load of office work. This practice has persisted to a certain extent, either because the physician is still too busy to properly evaluate and treat these patients, or he may feel that he has "lost the touch" as far as office gynecology is concerned.

Likewise the doctor who served in the Armed Forces was usually far removed from the field of gynecology, and may also now feel incompetent to handle these patients.

4. False Ideas regarding Pelvic Examinations.

The idea in some physicians minds that they will cause too much embarrassment to their friends who are patients, by performing a pelvic, leads to omission of the essential part of any complete examination. Following the failure of their family doctor to completely examine them, a number of these patients will seek consultation with the specialist. This is an abnormal situation. There may have been such a feeling among women at one time, but it has practically vanished. Most women at the present time realize the value of a complete examination, and expect the same when they go to their physician. They respect his thoroughness and judgement when he makes a complete examination. Every week we see one or two patients who come in for a pelvic examination saying that they went to the family physician several times but that he did not examine them "internally."

5. By-passing the General Practitioner.

This is one of the most difficult problems from the standpoint of the specialist, and also one of the most important from the standpoint of the family physician. Due to the importance placed on the specialist's rating during the recent world conflict, and the persistence of these ideas as practiced by the Veteran's Administration, and due in part to points 1 through 4 above, there has arisen the feeling in some that only the specialist is competent to treat patients. The fallacy in this thought is obvious. The solution to the problem, however, has not been found.

Is it better for the gynecologist to make a diagnosis in the case and then refer it back to the family physician for treatment, or to continue with the treatment himself? In either instance it would seem to give the

¹Presented before The South Carolina Medical Association, Myrtle Beach, S. C., May 17th, 1950.

patient the impression that the general practitioner was not competent to handle the case. The answer apparently would be an effort on the part of the family physician to better equip himself and his office to take care of these minor problems intelligently and adequately, in fairness to the patient and himself. Such is the purpose of the Academy of General Practice which has come into being in recent years.

By the foregoing discussion we do not mean to imply that there is no need for the specialist. The family physician should not hesitate to refer a patient to a gynecologist should he feel that his own management might, in any way, jeopardize her. Every physician, general practitioner or specialist, should realize his own limitations and never temporize with a patient while trying to "save face" for himself.

HISTORY.

The first essential in the management of any medical problem is proper diagnosis. The first step in arriving at any diagnosis is the taking of an adequate history. An adequate gynecologic history cannot be taken by a nurse or secretary, no matter how competent she may be. The personal nature of problems related to the genital organs makes it essential that they be discussed by the physician himself preferably in the privacy of his consultation room. The psychosomatic element in gynecologic problems can only be revealed by careful history taking. It is usually better not to record certain facts in the presence of the patient, but to wait until she is being readied for examination to make notes on her chart concerning these facts.

PHYSICAL EXAMINATION.

The necessity for performing a complete physical examination on any gynecologic patient is obvious. The greatest part of the examination need not be in detail, but sufficient to acquaint the examiner with possible disorders in other body systems. It should be realized that 85 percent of cancer in women is located in the breasts, generative organs, or lower rectum, all sites which are within reach of the examining fingers. Theoretically adequate examination of these three areas routinely from birth would enable one to prevent cancer or diagnose its existence early enough to obtain a cure, thus preventing 85 percent of cancer deaths in women.

It is important to realize that a large number of patients with complaints referable to the generative organs may actually be suffering from disorders of closely related organs. Guerrero² reported recently that 42 percent of 1,197 consecutive patients with gynecic symptom complexes complaints were found to be due to entities other than disease of the genitalia.

A gentle but thorough examination of the pelvic structures is the last part of the physical examination. If the patient is having a regular menstrual period it is best not to perform the pelvic examination. How-

ever, if there is a bloody discharge not associated with a normal period, a pelvic examination is definitely indicated.

LABORATORY EXAMINATION.

Routine laboratory work on any gynecologic patient should include a urinalysis (preferably obtained by catheter), partial blood work (particularly a corrected sedimentation rate, hemoglobin determination and an Rh factor), and vaginal smears and hanging drop preparations (particularly in the presence of any abnormal secretion). The use of vaginal and cervical cytology (method of Papanicolaou) as a screening agent for malignancy cannot now be included as routine in every office, yet it may be so in the near future. However, every physician can take smears for cytological examination, or biopsies, or both, on any case in whom there is a suspicion of malignancy.

Other special laboratory procedures will be mentioned later under specific conditions necessitating them.

COMMON COMPLAINTS

The complaints presented by female patients has changed but little over the past 50 years. We shall briefly discuss the most common of these complaints and the usually satisfactory management. Again we would mention the importance of remembering that complaints which seem referable to the generative tract may be due to disorders of closely related lower abdominal or pelvic structures. The importance of careful history taking and adequate examination cannot be over emphasized.

1. Menstrual Disturbances.

The disturbances of menstruation constitute a group of the most common complaints received by the family physician or gynecologist. These disorders include amenorrhea as well as hypermenorrhea (menorrhagia) and polymenorrhea (metrorrhagia).

a. Amenorrhea. It is indeed embarrassing at times to fail to first consider pregnancy when amenorrhea is complained of, regardless of the marital status, age, or history of the patient. Amenorrhea as one symptom of the menopause will be discussed later in the paper.

Primary amenorrhea may be due to congenital abnormalities of the generative organs, or organs of internal secretion for which there may or may not be any therapy depending on the structural derangement. Secondary amenorrhea may be psychic in origin or may be due to a debilitating systemic disease. It may also be due to disturbance of hormonal balance from many causes. If general measures such as vitamins and iron therapy, correct diet, reassurance and time do not bring about cyclic bleeding then further evaluation of the case is necessary. The patient should be carefully examined to rule out a masculinizing neoplasm of the pituitary, adrenals or ovaries. The use of hormonal stimulation in these patients, we feel, should be on the advice of a gynecologist or endocrinologist. Stimulating irradiation of the pituitary,

ovaries, and adrenal glands, in selected cases, should be administered only by a competent radiologist.

b. Hypermenorrhea and Polymenorrhea are more frequently seen than is functional amenorrhea. Any patient complaining of excessive or frequent vaginal bleeding, regardless of the age of the patient or the amount of the flow, should be carefully examined to rule out malignancy prior to institution of therapy. Vaginal and cervical cytology and/or cervical biopsy should be used without hesitation in any such patient. A diagnostic curettage is justified if there is any question after the above steps have been performed.

Unhealed lacerations of the cervix, cervical polypi, extensive erosions or eversion, ruptured cervical varices, or subinvolution of the uterus usually respond to office treatment. Organic pelvic pathology such as uterine myomata, malignancies, etc. necessitate surgical or radiological therapy. Blood dyscrasia and systemic diseases should next be ruled out. When one has arrived at a diagnosis of functional uterine bleeding, reassurance, diet, vitamin and iron therapy, and time may be all that is necessary. Empirical thyroid therapy is one of the most effective simple measures in treatment, but it must not be continued for prolonged periods without adequate follow-up.

In the persistent cases, having ruled out malignancy, one may use any number of methods to control the bleeding. Our preference is heavy doses of estrogens by mouth, until the bleeding has stopped, then gradual withdrawal of the drug, discontinuing it about eight days before a flow is wanted. This type of cyclic therapy may be needed for three or four months in order to reestablish a normal cycle. Estrogen and progesterone in combination have proved no more effective for us than estrogen alone. Androgens may be used but their effect is only temporary, if at all.

If no improvement is noted after a reasonable trial of carefully managed hormonal therapy, the problem should be referred to a specialist for curettage, metabolic studies and hormonal assays.

Again we would emphasize the importance of ruling out malignancy before beginning any form of therapy in a patient with irregular bleeding. Never postpone a pelvic examination because a patient is bleeding, if the bleeding is not that of a normal menstrual period.

2. Abnormal Vaginal Discharge.

Abnormal discharge from the vaginal tract is a common complaint, and may result from a multiplicity of causes. Its origin may be from the urethra, Skene's glands, Bartholin's glands, the vagina, cervix, uterus, tubes, or from the bladder or rectum through fistulous tracts. The source should be determined and secretions studied by stained smear, hanging drop, culture or Darkfield where indicated.

The most frequent cause of discharge is an eversion of the endocervical mucosa with erosion, hypertrophy and possibly Nabothian cysts, causing excessive secretion and lowgrade infection. In the absence of acute pelvic infections, and after ruling out cancer and

pregnancy, most cervical lesions may be satisfactorily treated in the office. Cauterization, electro-coagulation, or conization may be necessary. Self administered sulfa cream and acid douches for varying periods of time after such procedures result in better healing of the cervix.

Disturbed vaginal physiology often results in an infestation of trichomonads or yeast fungus, both of which cause an irritating vaginal discharge. Vaginal trichomoniasis is accompanied by a profuse foamy yellow-green discharge while the discharge of the yeast vaginitis is white and watery. The vaginal membranes are spotted with petechiae as a result of a trichomonas infestation, while in the yeast vaginitis the walls are coated with patches of white curdy material covering an inflamed area. In any case of yeast vaginitis, blood and urine examinations for diabetes should be carried out. In either of the above types of vaginitis we prefer office therapy until symptoms have abated, then selfmedication for varying periods.

Vaginal trichomoniasis is extremely resistant to a permanent cure, but usually fairly easily controlled symptomatically. The vagina should be thoroughly cleaned with soap and water, irrigated with an aqueous antiseptic and dried. Vaginal insufflation with medicated powder (silver picrate or Floraquin) is then carried out. This is repeated daily or every two days until the infestation seems controlled, following which the patient is given instructions as to the use of Floraquin suppositories and acid douches at home. Therapy should be continued throughout the next menstrual cycle and for 5 days following it, then throughout and for 5 days following the next three menstrual periods. The patients are told of the possibility of reinfection from the rectum and advised regarding cleansing habits after defecation. With continual recurrence the husband must be checked as a source of reinfection.

Yeast vaginitis therapy begins in the same manner of vaginal cleansing and drying. We have found nothing better for initial treatment than 2% aqueous gentian violet solution painted on and thoroughly dried. This procedure is repeated every two or three days with no treatment between times. After abatement of the symptoms the patients are prescribed either Albanox Gel (Ortho) or Propion Gel (Wyeth) to be used at home in conjunction with cleansing douches in an effort to restore normal vaginal flora and the normal pH. Patients with yeast vaginitis are told of the possibility of reinfection from their clothing and from their husbands (particularly from smegma of the uncircumcised mate), and are advised how to prevent same.

3. Dyspareunia and Frigidity.

Painful intercourse and lack of sexual desire are mentioned together because they are frequently associated symptoms. Dyspareunia on intromission of the penis in the absence of vulvar or vaginal abnormalities is usually associated with vaginismus and a de-

gree of frigidity. There is commonly a definite psychic element involved. Thoughtful understanding and careful reassurance along with vaginal dilatation, warm douches, instructions to both parties regarding intercourse, and attempts at stimulation of libido in the patient is usually adequate therapy. Frigidity in the absence of dyspareunia or pelvic abnormalities usually responds to the above treatment. The use of androgens for stimulation of the sexual appetite has proved very satisfactory.

Dyspareunia on deep penetration often indicates retroflexion and retroversion of the uterus with prolapse of the ovaries, chronic cervicitis with pelvic lymphadenitis, acute or chronic infections of the tubes, or pelvic neoplasms. Therapy will depend on the particular disorder present.

4. Backache.

The word "backache" is used to imply a multitude of pains. The etiology of the pain that causes the patient to seek medical advice may be orthopedic, urologic, neurologic, medical, psychic or gynecologic in nature. It is very necessary to remember this in evaluating any patient with such a complaint. Gynecologic causes of backache includes pelvic and vaginal relaxations, uterine malpositions, chronic cervicitis, varicosities of the broad ligaments, inflammation of the uterus, ovaries or pelvic peritoneum, and pelvic tumors.

The factor considered singly most important by most physicians and surgeons is a retroflexed and/or retroverted uterus. Too many of these patients are unnecessarily operated on before it is determined whether or not the retrodisplacement has anything to do with the patient's symptoms. Before performing a suspension for an uncomplicated retrodisplacement one should always prove that the operation is necessary by a "pessary test." By this we mean a therapeutic trial with a properly fitted vaginal pessary after manual replacement of the uterus. More often than not it is prolapse of the uterus accompanied by retrodisplacement which is causing the backache, and prolapse is not cured by suspension operations.

The management of other types of gynecologic backache would be too time consuming to attempt discussion of them in this paper.

5. Infertility.

The inability to conceive is causing a large number of patients to seek medical advice. The most frequently consulted physician is the family doctor. He should be able to carry out all but a few of the procedures leading to an analysis of the cause of the patient's infertility. Although each couple's problem must be individualized it is helpful to have a general routine plan of attack. A good policy is to perform the simple tests first, then give advice and reassurance and wait for one or two months before proceeding further. Our plan is somewhat as follows:

A complete history, physical examination and laboratory workup on the female, followed by a semen

analysis (or complete workup if such is possible) on the male. If no definite abnormality of either partner is found, general corrective measures are instituted (diet, rest, exercise, abstinence from alcohol and smoking, empiric thyroid, and iron and vitamins if needed), the patient is informed when to have intercourse, and is instructed to record the morning temperature for 2 or 3 months. The resultant temperature curve will give an indication whether or not the patient ovulates.

If there has been no success with the above, the patient is instructed to return within 24 hours after the onset of the next menstrual period for an endometrial biopsy. This simple office procedure will, by allowing histologic examination of the endometrium, determine whether or not ovulation has preceded that period of flow.

About 2 weeks after this we usually perform a Huhner post-coital test, to determine whether or not the sperm are freely passing through the cervical mucus. If there is evidence of incompatible cervical mucus, a careful endocervical cauterization is justified.

Since most general practitioners are not equipped to perform tubal visualizations it may be necessary to refer the patient to a gynecologist if success has not been obtained up to this point. However, do not be surprised if your specialist colleague is able to do no better than you have done.

6. Dysmenorrhea.

Painful menstruation may be either primary or secondary. Primary dysmenorrhea is present without demonstrable pelvic lesion. There are many possible causes, the most usual of which are of constitutional, endocrine or psychic origin. Treatment is legion and we have nothing new to offer. Relief may be obtained by reassurance, along with attempts at correction of nutritional, psychic and mental factors involved. Antispasmodics combined with barbiturates and with or without codeine will help the majority. Office dilations and possibly the use of a stem pessary will benefit some cases. Fluid and salt restriction with ammonium chloride administration for 5 to 7 days prior to the onset of flow will relieve the vast majority of cases with premenstrual tension.

Dysmenorrhea secondary to pelvic pathology responds permanently only with treatment of the underlying cause. The use of androgens in cases of endometriosis gives excellent results, provided the condition is not too widespread.

7. The Menopause.

The climacteric with its associated cessation of ovarian function and resultant vaso-motor disturbances causes a varied response in any given group of women. Those who have been emotionally stable throughout life rarely are adversely affected by these symptoms. However, the high-strung, nervous woman with a tendency to emotional instability will usually complain excessively when such occurs.

Successful treatment depends as much on the physician's understanding of the individual patient, and the patient's confidence in her physician, as on anything else. With complete reassurance of the patient, correction of any nutritional deficiencies, and symptomatic therapy, most patients respond well. The use of estrogens should be completely abolished in the physiologic menopause, or limited to small doses orally and for only a short period of time in the occasional case with severe symptoms. Much more harm than good may come from prolonged administration of estrogenic substances. We prefer mild sedation with barbiturates and/or stimulation with Dexidrine (R) or Dexamyl (R) as the case indicates, rather than administration of hormones.

8. Periodic Examinations.

A relatively large percentage of our patients come in for routine checkups. These visits are prompted by a desire to prevent the development of a serious condition such as cancer, and are largely a result of lay education as to the value of periodic examinations. There is no reason why the family physician should not be performing these examinations and encouraging more patients to have them done. Again we would stress the importance of examination of the breasts, genital organs and rectum in any female patient visiting her physician. It is our hope that vaginal and cervical cytology will soon be a part of every examination of this nature in the family physician's office, as it is in our own.

9. Urologic Symptoms.

Gynecologic complaints frequently are associated with urologic symptoms such as urgency, frequency and dysuria. Disorders of the female genitals may produce disturbances in the urinary tract and visa versa. It is essential to investigate both systems when symptoms relating to either are given.

10. Premarital Examinations.

In spite of the fact that our state does not require premarital examinations, a large number of prospective brides and grooms are requesting such conferences as a result of lay education. These examinations should be handled adequately by the family physician. The bride-to-be should have a complete physical ex-

amination, along with pre- and post-examination conferences. The groom-to-be should have a blood test for syphilis and should also be invited for a conference. Even though the prospective groom has had sexual experiences for a long time, he must be made aware of the importance of the first few days of marriage and the effect that these days may have on his wife for all time. Both young people should be instructed in contraceptive methods as well as about sexual intercourse. The physician must constantly attempt to allay fear concerning marriage in general, the act of intercourse, and childbearing. If any physical defect is found that might prevent normal sexual activity, this should be remedied far enough in advance of the wedding, in order that healing has taken place prior to that date. Adequate and intelligent premarital conferences can prevent many instances that might lead to unhappy marriages.

SUMMARY AND CONCLUSIONS.

1. Office gynecology constitutes an important portion of the average practitioners daily work.
2. 75 to 80% of office gynecology should be adequately taken care of by the family physician.
3. Many factors are responsible for the high percentage of these patients who are being seen by the specialist.
4. A careful history and physical examination and basic laboratory work should precede any gynecologic therapy.
5. Adequate examination of the breasts, genitals and rectum will cover the site of 85% of the cancer in women.
6. Vaginal and cervical cytology is a valuable screening agent for cancer of the cervix or fundus uteri.
7. Certain common office gynecology complaints are listed and briefly discussed.

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Submaxillary Duct Calculi

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Submaxillary duct calculi produced a characteristic clinical syndrome by which the diagnosis may be established. All are amenable to surgical therapy.

More than 86 percent of all salivary calculi occur in the submaxillary gland and duct. The calculi are found much more frequently in the ducts than in the gland. Submaxillary calculi are not common, nor are they rare. They may occur at any age, though they usually appear in middle age individuals. They are seen more frequently in male patients. The stones are usually single but may be multiple. They vary in size from very small particles to one or two inches in diameter. Weights vary; the largest reported was 67 grams.

On the average the composition of the calculi are variously estimated to contain calcium phosphate, 65 percent; organic matter, 25 percent; calcium carbonate, 6 percent; with traces of iron and magnesium. Sometimes foreign bodies such as pieces of wood, grass particles, etc., are reported present.

The etiology of these calculi is still uncertain. The causes have been variously ascribed to oral sepsis, dental caries, systemic infections and endocrinopathy. They may form about foreign bodies and may have as their nucleus bacteria or waste products from about the mouth. They may be formed by a change in the reaction of the salivary secretion, causing a precipitation of salts.

The anatomic relations of the salivary gland and duct may predispose to the greater number of submaxillary calculi (Figure 1). The submaxillary gland is situated at a lower level than the duct itself. This tends to retard the flow of saliva from the gland to its point of exit below the tongue. The duct is longer than the other salivary ducts and with its upward slope stones cannot be expelled as easily as in the other glands. Finally the opening of the submaxillary duct being located behind the incisor teeth becomes exposed to the trauma incidental to mastication. Foreign bodies can more easily be forced into the duct at this site.

The symptoms are usually those due to obstruction and associate infection in the duct or gland. The duct becomes blocked by a stone causing a back pressure of the saliva in the duct gland. The gland enlarges and becomes tense and quite painful after eating. It is palpable just below the mandible. (Figure 1). This mass is usually tender. Pain is produced to the extent that the patient usually stops eating solid food.

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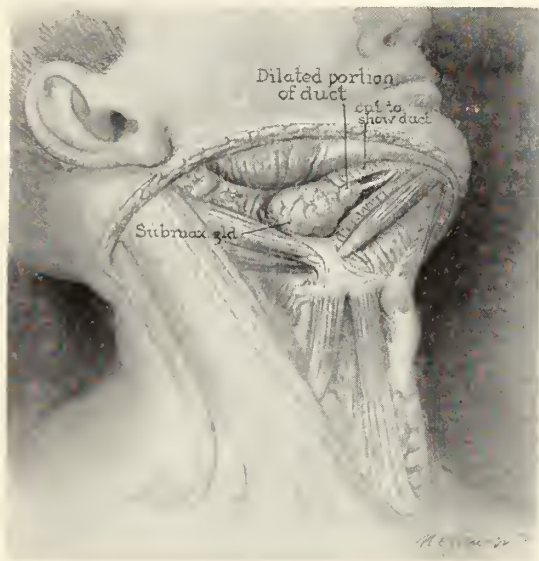


FIGURE I

Anatomical relationships of submaxillary gland and duct. The duct is obstructed by a calculus.



FIGURE II

X-ray showing calculus in middle third of submaxillary duct.

X-rays, when properly taken, nearly always demonstrate the calculus. (Fig. II). X-rays are made with large intra-oral dental film facing down with the film parallel to the floor of the mouth. The tube is placed beneath the mandible pointing perpendicular to the film.¹

Differential diagnosis should be made from tumors of the jaw or lymph glands, salivary gland infection,

tumors, cysts, enlarged lymph nodes, tuberculosis, lues, and actinomycosis.

The treatment of submaxillary calculi is usually considered to be surgical. Many small stones will pass spontaneously due to the hydrostatic pressure of the saliva behind them. Bougies may be introduced into the duct, dilating it and allowing the calculus to pass. Many calculi are too large to pass and will require surgery. The initial approach should always be inside the mouth. Nerve block with 2 percent procaine supplemented with 10 percent cocaine may be used. For more extensive explorations, intratracheal anesthesia may be required.

The incision is over the calculus and parallel to the duct. The mucosa is not usually sutured or only loosely approximated. If attempts to remove the stone from the duct using an oral approach are unsuccessful, the entire submaxillary gland and proximal duct should be removed through an external incision parallel to and just below the lower border of the mandible. Intratracheal anesthesia is preferable.

CASE REPORTS

1. L.S., a 30-year-old white female was seen as an out-patient on 8/2/48. There was a history of swelling in the left side of the neck, particularly after eating.

Examination revealed edema around the opening of the left submaxillary duct and of the floor of the mouth on the left. An area of induration was palpable 3-4 mm. from the opening of the duct. The left submaxillary gland was slightly enlarged and tender. X-ray examination on 8/2/48 revealed a density in the region of the left submaxillary duct. On 8/4/48 the duct was cannulated and opened. A small calculus was removed. The incision was left open. The patient had an uneventful convalescence.

2. B.H.S., a 44-year-old male was admitted to the hospital on 7/6/50 with a complaint of swelling in the left side of his neck. The swelling was noted two days before admission and following the eating of a piece of candy. Since then, he noticed a painful swelling in the left submaxillary region after meals. About a half-hour after the meal, the pain and swelling would subside.

On examination, the patient was normal except for the mouth and neck. The left submaxillary duct was swollen and reddened. There were no secretions from the left duct. No stones were palpable in the duct. On examinations of the neck, the left submaxillary gland was enlarged and tender to palpation.

On 7/7/50 an X-ray of the floor of the mouth revealed a small round density (Figure 2). This was presumably a stone in the left submaxillary duct.

On 7/10/50 using 1 percent local procaine, the

left submaxillary duct was dissected out from within the mouth. A stone about one-half cm. in diameter was found in the mid-third of the duct. The duct was opened and the stone extracted. The duct was left unsutured. Recovery from pain and swelling in the left submaxillary gland was immediate, and the patient was discharged on 7/15/50 with no complaint.

3. R.J.B., a 35-year-old dairy farmer was first seen on 8/6/48, one week prior to admission to the Spartanburg General Hospital with the chief complaint of pain, swelling, and tenderness in the left submaxillary region. Pain was accentuated in the submaxillary gland by eating.

Examination revealed a well-developed and nourished white male in acute distress. There was considerable tenderness over the left submaxillary region. No calculi was palpable. The remainder of the physical examination was normal.

On 8/13/48, using local 1 percent novacaine, exploration of the submaxillary duct was done both by probing and by incising and opening the duct. No calculi was found to be present in the duct. The patient was discharged on the day of operation.

On 8/21/48 he was re-admitted to the hospital for removal of the stone or excision of the submaxillary gland. This was first attempted on 8/23/48 under general anesthesia. Because of difficulty with anesthesia due to an old ankylosis of the jaw, surgery was postponed. On 8/26/48 under local anesthesia, the left submaxillary gland, with the stone imbedded in it, was excised. The stone was present in the gland near the duct. The patient did well post-operatively and was discharged markedly improved on the fourth postoperative day. This demonstrates a case when the calculus imbedded in the gland caused obstruction of the saliva and required removal of the gland.

SUMMARY

The diagnosis and treatment of submaxillary duct calculi has been discussed. Three representative cases are presented.

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CANCER

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CANCER: A RELEASE OF GROWTH POTENTIAL

BY

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The explanation of the cause of cancer is a problem of growth. Definitions of malignant tumors are as numerous as there are authors who write on the subject. However, all such definitions include the concept and even the word growth. Yet, amazingly enough, the study of the normal growth of tissue has only recently been utilized as an avenue of investigation in the attempt to seek out an understanding of the malignant process.

It has been frequently stated, in one form or another, that the fundamental process in the development of cancer is a combination of stimulants to growth and genetic potentials which by interaction induce malignant growth. It would seem clear that, in order to ever understand these principles which induce abnormality of growth, one must first understand the forces which work together to produce normal growth.

The phenomenon of growth might be considered as consisting of two concurrently operating phases. One is the simple increase in mass; and the other is the development of tissues indicated by the change in the number, character and relationship of the cells. These changes in cell morphology are accompanied by a differentiation of function. While they differ in fundamental nature, activation, and control, these two processes cannot exist independently of each other. Simple increase in mass cannot produce a functioning integrated individual nor can cells divide and differentiate without increasing their volume of protoplasm.

The initiating mechanism which causes the ovum to begin its cleavage and synthesis is not clearly understood but it is recognized that the phenomenon of fertilization is the stimulating event. We do know, however, some of the factors which exert control over the early stages of growth. (1) Everyone who has stored eggs in refrigerators can certify that low temperature retards development. (2) Every specie of animal has its own rate of growth in that the developmental period varies with various species. (3) There is a wealth of experimental data to support the importance of an adequate supply of the various elements of nutrition. (4) In addition to these extrinsic physico-chemical influences, there are a group of poorly understood growth promoting hormonal

factors of which three different ones have been experimentally emphasized. First, it has been repeatedly shown that embryonic tissue grows in tissue culture at a much more rapid rate if placental extracts are supplied. Second, removal of the thyroid of embryos will produce dwarfs at the time of maturation. Third, hypophysectomy in young animals results in the limitation of growth while addition of this growth-principle produces giantism.

Simple increase in mass is by no means the only process involved in the early growth of the embryo. If it were, the ovum would never abandon its spherical morphology. It is quite obvious, then, that growth proceeds in different portions of the organism at distinctly different rates. This accounts for the timing of the development of the various portions of the embryo and is referred to as individuation.

The nature of the control mechanisms of this differentiation and individuation is exceedingly complex. The explanations are not clear and can only be enunciated in the most general terms. Detailed consideration of these principles is outside the scope of the present discussion; however, most investigators utilize the concept that these changes in morphology occur as a result of a complex system of evocators and organizers. The complexity of this concept is indicated by the necessity to invoke a hierarchy of organizers of various degrees of potency. For example, the stimulus for the formation of the neural tube is designated as a *primary organizer*; while the chemical component derived from the midbrain which stimulates the formation of the eye cup is designated as a *secondary organizer*. And yet a third substance, elaborated from the developing eye cup itself and stimulating the formation of the lens, is called a *tertiary organizer*.

To complicate the matter further, the periodicity of the formation of the various portions of the embryo requires us to regard this phenomenon in terms of the competency of the cells to react to stimulation by growth. Thus, while these stimulating substances are elaborated over relatively long periods of time, there are times when the relative quantity of the organizer is at a maximum. Not only must this assumption be made but also it must be conceded that the ability of the cells to react to stimulation is variable, and that there occur periods of heightened susceptibility because the development of tissues and organs occupy a specific temporal relationship one to another. Therefore, to effect perfect development, the organizer must not only be elaborated at the proper time and in the proper quantity but also the cells must be susceptible to their stimulation at the proper time and competent

(From the Department of Pathology, School of Medicine, Medical College of the State of South Carolina, Charleston, South Carolina)

to respond by forming the tissue or organs for which this region is committed.

The relationship of the principles of normal growth to those of abnormal growth has, in the light of recent events, become increasingly important. The chemical similarity between some of the hormonal stimuli to normal growth and the carcinogenic hydrocarbons has been emphasized. This similarity indicates a need for consolidation and reorientation of our knowledge of growth in general. For it is evident that, if we are ever to understand the mechanism of the induction of malignant growth, we must come to an understanding of the factors which are responsible for the maintenance of normal tissue equilibrium.

The tissue equilibrium of normal growth is maintained by a very complicated system of interaction between stimulating factors for growth and inhibiting factors of growth which are located in the cell proper. This limitation of growth is spoken of as the "field forces" and is considered to be under the influence of the genetic composition of the cells. These field forces include not only those factors which determine the species but also the factors which promote organ and tissue differentiation. The maintenance of a biologic equilibrium between stimulating and resistive forces can be upset either by an accentuation of the stimulating mechanisms or by a diminution of the resistive forces. Thus, stimulation can be regarded as either active or passive.

The factors controlling the tissue equilibrium can be experimentally upset as has been proven time and time again by utilizing the artificial agencies referred to as carcinogens. The agents capable of inducing malignant growth are very diverse in character and virtually every category of agent has been implicated at one time or another. While no useful purpose would be served by a recitation of the separate agents which have been found to be carcinogenic, it is sufficient to say that they fall into such broad classifications as physical, biologic, and chemical. The chief physical agents are sunlight and x-ray. The biologic agents, chiefly microorganisms, comprise an important group. The most prominent and most extensively studied organism is the virus. The activity of the Shope papilloma virus in the production of malignant skin tumors in rabbits is well known. Equally familiar to everyone are the Rous virus of fowl sarcoma and the virus identified as the milk factor, which is of such great importance in the induction of carcinoma of the breast in mice. The chemical agents form a very large group made up of various chemicals which from time to time have been implicated. The most potent and most commonly used experimental chemicals belong to the class of hydrocarbons. The very diversity of the nature of all these agents would suggest that the alteration which induces malignant growth is not solely an intrinsic property of the stimulating agent but rather there must be a defect in the tissue equilibrium which can be initiated or accentuated by a variety of agents.

The ease with which a given malignant growth can be induced in the laboratory by a given agent varies in different species of animals. For an example, the C3H strain of mice develops cancer of the breast with amazing facility. On the other hand, other strains of mice are resistant to the most powerful carcinogenic agents. Not only does this specie limitation exist, but also there appear great differences within the individual animals in that the site of the development of the malignant process varies from organ to organ. For example, in the C3H strain of mice cited above it is easy to induce a carcinoma of the breast; however, it is extremely difficult to induce a malignant growth in any other organ than the breast. Numerous examples of this principle can be cited, such as the Shope papilloma virus. It regularly produces papillomata in the skin of the rabbit, but will not induce a malignant growth in other species nor will it induce this change in any area other than the skin of the rabbit. Moreover, the wild rabbit is more susceptible than the albino rabbit.

These observations inevitably lead back to the cell and its internal regulatory mechanisms. This regulatory mechanism is thought to be vested in the genetic composition of the cell not only at the level of specie determination, but also at the level of organ differentiation. This idea has been supported by ample experimental evidence. The literature of investigation into the causation of cancer contains reports of extensive work as to just what part of the cell governs the regulation of growth. Many observers believe that this regulation is a function of the chromosomes of the nuclei; others take the view that there are cytoplasmic locations for various inhibitors; while still other investigators are equally convinced that it is in the intracellular cement substance that this regulative force can be found. Because of this confusion we are not able to elaborate a very clear idea as to just the precise location of these regulatory mechanisms; however, all investigators concede that this field force type of regulation of growth potential does indeed exist.

The proposition, therefore, seems reasonably well supported that abnormal growth is a result of an interaction between a carcinogenic stimulus to growth and the genetic control of the cellular metabolism. The stimulus may be of a variable potency and the control mechanism may have a variable stability. This means that a weak stimulus acting on cells of unstable control mechanism may result in a cancerous growth. On the other hand, an extremely powerful stimulus would be required to initiate the process in a stable cell. This principle is accentuated by the fact that certain of the agents, for example x-ray, will produce a malignant growth in almost all species and almost any location. Thus, it appears that only the most stable of tissues can resist the power of this carcinogenic agent. However, since these areas do resist in some instances, it is clear that some field forces are so stable that even this powerful carcinogenic agent cannot induce the

growth of the malignant process.

In contrasting the general principles found in our best explanations of the development of the malignant process with our concepts of normal growth mechanisms we find an absolute parallelism. One could consider the carcinogens as equivalent to the evocators of embryonic development. Indeed, a chemical correlation between the evocator obtained from the dorsal lip of the blastophore has been made with some of the carcinogenic hydrocarbons. One could further consider that the field forces governing cellular com-

petency in embryonic development are the same or analogous to genetic factors governing the stability of the equilibrium producing mechanism of cellular division.

If this line of reasoning be proven to be correct, namely, that the carcinogenic agents are multitudinous in nature and potency, and that the forces producing equilibrium in growth are variable in stability, the search for a single cause of cancer may well prove to be futile.

**TEN POINT PROGRAM
OF THE
SOUTH CAROLINA MEDICAL ASSOCIATION**

1. Cooperation

To promote closer cooperation and better understanding between all agencies, groups and individuals concerned with providing and improving medical care for the people of South Carolina.

2. Extension of Medical Care

To study constantly the need and availability of medical care in each county of the State and in the State at large.

To promote plans for providing or improving medical care where is a need, particularly in the rural areas.

3. Pre-Paid Hospital and Medical Care

To make voluntary pre-paid hospital and sickness insurance available to all the people of the State (through Blue Cross, Blue Shield, and commercial insurance policies), and to promote the widespread purchase of such insurance.

4. Care of Indigent

To work with local county and state agencies, and with philanthropic organizations, toward securing good medical care for the indigent.

5. Public Health

To support the South Carolina State Board of Health in its broad program of preventing diseases and of safeguarding the health of our people.

6. Health Councils

To support the State Health Council in its announced program. To sponsor

the formation of a County Health Council in every county of the state, and to encourage our members to support and to work with these organizations.

7. Hospitals

To promote the expansion of present hospital facilities and the building of new hospitals—where there is a definite need.

To strive for highest standards of professional care in the hospitals in the State.

8. Medical Colleges

To support the Medical College of the State of South Carolina and to bend our efforts toward keeping its standards of education on a par with other medical colleges throughout the country.

To promote good nursing education and good nursing care throughout the State.

9. Education of the Public

To acquaint the citizens of the State with regard to the problems of medical care in existence today, to inform them as to what is being done to solve these problems, and to advise with them as to further plans for securing better health and better medical care for the people of South Carolina.

10. Political Medicine

To prevent political control or domination of medical practice or of medical education.

South Carolina Medical Association

1951-1952

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The Journal of the South Carolina Medical Association

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8½ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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Our Association made a significant and outstanding contribution to medical education in appropriating ten thousand dollars to the American Medical Education Foundation. The action was taken by our Council following the unanimous recommendation of our House of Delegates and the money is to be earmarked for our own Medical College in Charleston.

Whether our medical schools will continue to function as integral and independent institutions or whether they will be subject to federal supervision and subsequent control will depend upon the source from which financial support is obtained.

Medical schools are in a precarious financial condition today. The high cost of living, decreased income from endowments, diminution of gifts from philanthropic foundations and individuals—all have contributed to the present situation. Some schools are cutting their operating costs to a bare minimum, others are operating at a deficit.

The American Medical Association, meeting the challenge, established the American Medical Education Foundation and made the first contribution of \$500,000. State associations and individual physicians are now urged to give and give generously. The California Medical Association was the first to respond with a contribution of \$100,000.00. We do not know what other states have done but we are proud to announce our own Association's gift of \$10,000.00.

The California Medical Association with approximately 11,000 members has given \$100,000, our Association with approximately 1,100 members has given \$10,000—each association giving slightly over \$10.00 per member. If other state associations would give in proportion a million and a half dollars would be added to the treasury of the Foundation.

\$100.00

The goal set for the American Medical Education Foundation this year is \$5,000,000. As noted in the editorial above, a third of this amount could be secured from state medical associations. This coupled

with the original donation of the American Medical Association would give two million, or forty percent of the goal.

The appeal is now being made to all individual physicians to contribute \$100.00 each to the cause. And our own Dr. W. L. (Buck) Pressly, member of the Council on Medical Education and Hospitals, has appointed himself a committee of one to secure that amount from as many of our members as possible. We endorse enthusiastically his efforts and offer him our every support.

Each physician should not only deem it his duty but his privilege to contribute personally to the Foundation. Each one of us secured a medical education for which we paid only a part of the cost. Each one of us is anxious to have our medical schools remain free of federal supervision or control. To repay an obligation of the past and to ensure medicine's freedom for the future—these are the reasons which should motivate our gift.

Those who want to have their part in this movement are requested to make out their checks to the American Medical Education Foundation and to send them to 535 North Dearborn Street, Chicago 10, Illinois; to Dr. W. L. Pressly, Due West, S. C.; or to this office.

OUR NEW LEADERS

At the recent meeting of our Association, several new men were elected to office and they will now play a vital part in our activities.

Dr. J. D. Guess was installed as President, and Dr. Lawrence Thackston of Orangeburg was chosen as President-Elect. A practicing urologist, a veteran of World War I and II, a member of Council for many years, a past president and leader in his county and district societies, Dr. Thackston is fully equipped to give forward-looking and wise leadership.

Dr. J. B. Latimer of Anderson, having completed a long term of service on Council, was elected to the Vice-Presidency. The Association will thus have the benefit of his counsel for another year since the Vice President is also a member of Council.

Dr. N. B. Heyward was re-elected Secretary, Dr. J. H. Stokes, Treasurer, and Dr. J. P. Price delegate to the American Medical Association.

To succeed Dr. Hugh Smith who asked that his name not be considered for re-election, Dr. William Weston, Jr. of Columbia, was elected as the second delegate to the A. M. A. A practicing pediatrician, a past president of the Columbia Medical Society, Chairman of the S. C. Chapter of the American Academy of Pediatrics, a member of the Advisory Committee to the Crippled Children's Division of the State Board of Health, a son of Dr. William Weston, Sr., who has been a member of the House of Delegates of the A. M. A. for a quarter of a century—Dr. Weston is amply qualified to represent us in national councils.

Three new members were elected to Council. Dr. Charles Wyatt of Greenville, Dr. A. C. Bozard of Manning, and Dr. James H. Gressette of Orangeburg. Each of these men is a recognized leader in his district and will bring to the Council judgment based upon sound experience.

At the reorganization meeting Council elected Dr. O. B. Mayer, Chairman; Dr. J. W. Chapman, Vice Chairman; Mr. M. L. Meadors, Business Manager and Counsel; and Dr. J. P. Price, Editor of the Journal.

A JOB WELL DONE

After serving as a member of the House of Delegates of the American Medical Association for six years, Dr. Hugh Smith of Greenville, requested that his name not be considered for re-election.

It has been our opportunity to observe Dr. Smith at work in his task of representing this Association, and we wish to pay our tribute to him. Studious, forward-looking, sincerely honest, ready to fight for what he thought was right, Dr. Smith has been a Delegate of whom South Carolina should be proud.

On behalf of the Association, and of his many friends in this state and throughout the country we say, "Thank you, Hugh, for a job well done."

REPORT TO MEDICAL COLLEGE ALUMNI ASSOCIATION

May 16, 1951

KENNETH M. LYNCH, M. D., PRESIDENT

In the spring of 1944 plans of large and far-reaching proportions and implications, composing what came to be known as the Expansion Program, were launched by laying before the Faculty a brief report stating the principles of what must be done to set the Medical College in its rightful position and to assure the accomplishment of its proper functions and its obligations.

The basis of the structure of that program was, and is, that it is the job of the Medical College to do

its part in providing a sufficient number of doctors who have been trained and tried through full and complete educational and training processes. From searching study and calculations, a goal of medical classes of about 80 was set. That goal has been reached. The entering class was increased to 60 in 1944. Seventy will be admitted this year, and at least eighty next year.

Involved in the requirements to attain the objective was, of course, the securing of the proper physical facilities and personnel with which a satisfactory educational and training program could be carried out.

Essentially the whole matter depended upon finding the necessary financial support. The Medical College had no money, and its budget was totally inadequate. That financing has been completed. As of May 4, 1951, the last required financial provision was made.

CONSTRUCTION PROGRAM

Composing the physical facilities required were (a) a hospital of 400 or more beds with associated school of nursing and other essentials of a teaching hospital (b) enlargement of the laboratory, clinic, and library buildings, and (c) housing for students and some elements of the staff. The provision of funds for all of this was completed when the General Assembly which has just adjourned appropriated an additional \$351,000.00, to which a \$100,000.00 grant from the National Cancer Institute will be added, for the construction of a teaching and research laboratory addition.

As the construction program progressed, other associated institutes and agencies were brought into the development, including a new tuberculosis hospital, for which the contract will be let on June 3, and a public health center. Others will inevitably follow.

The land required was provided by (a) Charleston County, which spent \$450,000.00 or more in donating the hospital site (b) the City of Charleston, which closed and donated a street of two blocks' length on the same grounds (c) The Medical Society of South Carolina (Roper Hospital) which donated a site for the school of nursing building (d) the Alumni Association, which provided the land for dormitories (and incidentally made the location of the tuberculosis hospital possible) and (e) the State, which provided \$100,000.00 for an additional block.

Altogether the campus for this educational, training, research, hospital, clinic, health and medical center now secured composes an intact area of 18 or more city blocks in the heart of the community.

The amount of money already spent or now in hand for this physical development is \$11,301,000. This does not include the existing plant of the Medical College, nor does it include the new Roper Hospital, the tuberculosis hospital and public health center for which at least an additional \$2,250,000 will have been spent.

The first contract was for removing some 50 buildings from the hospital site. That has been completed. The first of the major construction contracts has been let. It will be at most a few weeks when actual work will begin. Within a short time we shall be ready to let the contract for the laboratory building, which should be completed in about a year, and shortly thereafter will come the main contract for the hospital superstructure and the school of nursing. This is tied to a time schedule governed by the distribution of the Federal grant and will extend over a period of at least three years. By that time the dormitory and housing project should also have been completed.

STAFF

In an effort to find the means for securing the necessary physical facilities, it was not lost to sight that unless these were to serve as the workshop of a competent staff, the effort and money would be wasted. Brains rank bricks, but a place and tools must be supplied for the use of brains or that primary requisite would likewise be wasted.

To date the administrative organization and every department have been either entirely rebuilt or satisfactorily augmented. Department heads, associates, assistants and technical helpers have been gathered, which accomplishment, if I should express pride in anything, would come first. The full-time staff, upon which present day medical training is absolutely dependent, has been more than doubled. It now constitutes 28 of professorial rank and 30 associates, instructors and fellows, a total of 58 of teaching responsibility, to say nothing of a full corps of technical and administrative assistants.

These people have been provided with suitable conditions and equipment, and this year around a quarter of a million dollars, twice the amount of the total former budget, supports a varied and creditable research program.

I know of no comparable institution with superior staff, standards, organization, opportunity and product.

BUDGET

Needless to say, financing this accomplishment has been a task requiring tireless attention.

In the spring of 1944 the state appropriation had been set at \$110,000.00, and even that was seriously threatened.

The funds provided for the operational budget of the Medical College for the coming year amount to more than \$1,000,000.00, nearly ten times what the legislature had set in 1944, or an increase of nearly 1000%, if it may be figured that way.

Not only has the South Carolina General Assembly appropriated the capital outlay for the construction program, but for the eight consecutive sessions concerned, it has provided every cent requested, a record that I doubt has ever been equalled anywhere.

ACKNOWLEDGMENTS

A large number of individuals, organizations and agencies, as well as the governments of city, county, state and national levels, have helped as we have gone along, some at crucial times, some continuously. I would like to call a roll of the names of people who have occupied important parts. I have thought much of ways to reward or at least to acknowledge those who have offered themselves or who have responded to call.

There is no means for such compensation—the reward to them can only be in the satisfaction that comes within the heart and mind from a consciousness of having served and given of one's self.

Perhaps I might risk here an acknowledgment of a deep and abiding sense of gratefulness to the four governors and to the state legislatures of each session for listening, seeing, believing and supporting. And to the present Board of Trustees and Faculty, who have not faltered. And to the South Carolina Medical Association which gave initial backing and which on yesterday took a very significant action in appropriating to the Medical College \$10,000.00 "for use in increasing enrollment."

To the Alumni Association which has contributed in a large material way, and individually to its members, with nearly all of whom I have had the privilege and honor of intimate association, I am happy to report upon a mission that is in a very definite sense successfully completed.

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

TEN THOUSAND TO EDUCATION FOUNDATION

Of vital interest and importance to the medical profession was the decision by the Council of the South Carolina Medical Association, with approval of the House of Delegates, to contribute the sum of \$10,000.00 to the National Education Foundation of A. M. A. By this action the State organization takes its place with several other State Medical Societies which have made substantial contributions to this fund. The sum is at the ratio of approximately \$10.00 each, for the dues-paying members of the State Association and percentagewise will compare favorably with the amount of contributions from some of the larger organizations, located in much more highly developed areas of the country.

In thus contributing a substantial amount to the fund instituted last December by the Action of A. M. A.'s Board of Trustees, the State Association is participating, and is keeping pace with other component societies in the profession's movement toward solution of the most immediately pressing problem with which we are concerned. It is through unjustified attacks upon the profession's attitude toward the education of doctors that the opponents of free medical practice have done most damage within recent months. The next step—if it can be accomplished—will be the passage of the bill to provide Federal Aid—and control—for medical schools. If the medical profession, through the National Education Foundation, can forestall that action it will have removed one serious threat of Federal domination of medical training and practice, while at the same time it makes provision for assistance which actually is much needed by the Medical Schools. And in so doing it will give an undeniable answer to the false charges which have been made to the effect that the organizations of the profession have tried to limit the number of physicians and discourage their increase.

In authorizing this contribution to the cause of Medical education, the South Carolina Medical Association specified that the amounts be allocated, if possible, for the use of the Medical College of South Carolina. It is understood that such allocation is provided for in the rules governing acceptance of contributions by the Foundation. As soon as assurance is obtained that it will be given recognition in this instance the remittance will be sent.

This points up the value to the State Association of maintaining a substantial financial reserve for use when the occasion arises—in advancing the best interests of the members of the Association and the profession as a whole.

Twice within two years the State organization has had occasion, and has been in position to supply the sum of \$10,000.00 for worthy causes related to the welfare of profession and public alike. The other instance was the loan without interest to the South Carolina Medical Care Plan for its initial capital, upon its organization last year. That was not a donation but an investment, represented by promissory note which is payable on demand.

Accumulation of such reserves has been possible only through the current dues and amounts earned from Journal advertising.

PALMETTO ASSOCIATION REQUEST TO BE STUDIED

There was brought to the Council of the South Carolina Medical Association at the annual meeting in May, a Resolution of the Palmetto Medical, Dental and Pharmaceutical Association of the state requesting admission to membership in our organization of negro physicians licensed to practice medicine in South Carolina who are in good standing in their own Association.

The Council gave the matter serious consideration and recommended to the House of Delegates, the following Resolution which was adopted. As a result, the suggestion will be given further serious study within the coming months.

The matter is one which deserves careful thought, and that it will receive this, is assured by the decision to refer it to the Committee appointed for the purpose. Undoubtedly, a solution satisfactory to all parties will be obtained as a result.

The Resolution:

WHEREAS: The Palmetto Medical, Dental and Pharmaceutical Association of the State of South Carolina has memorialized the South Carolina Medical Association requesting that negro physicians licensed to practice medicine in South Carolina and who are in good standing in the Palmetto Medical, Dental and Pharmaceutical Association be granted the privilege of membership in the South Carolina Medical Association, and;

WHEREAS: the House of Delegates recognizes the factuality of statements made in the preamble to the resolution requesting such privilege of membership, but;

WHEREAS: it is recognized that there are many difficulties involved in granting this privilege which will require serious study for their resolution, and realizing further that some of these are beyond the power of the State Association to remove;

Now, THEREFORE BE IT RESOLVED that a committee consisting of the President, the Chairman of the Board of Trustees of the Medical College of the State of South Carolina, and the senior delegate of the state association to the House of Delegates of the American Medical Association be designated to serve with a committee from the Palmetto Association and to study this entire matter from all angles and to report back with recommendations at the 1952 meeting of the House of Delegates.

JOHN TEMPLE GRAVES IS BANQUET SPEAKER

"When the history of socialism's defeat in America is written—and it is most certainly going to be written—it may well be reported that America's men of medicine were her embattled farmers at Bunker Hill and also her finishing-touchers at Yorktown.

"May it be said, too, that you doctors, whose influence is infinite because we feel so tender and special about you, arrived ahead of the rest of us at that fine but sure line that must divide social-mindedness from socialism, human welfare from the welfare state. You are doing it with your increasing sense of the economic problem in medicine for the masses and in your many co-operations towards what Winston Churchill called the "magic of percentages" for insurance against the high cost of being sick.

"If there is hope of peace and survival today, if men are anywhere still free and have promise of remaining free, it is not because of the United Nations, much as we might wish it to be and hope that someday it may be. It is because the United States of America is strong.

"What makes America strong is primarily its atomic stockpile, but beneath and beyond that, the secret is the great economy of America, this magic economy with which lately we have fought two allies and ourselves, producing more civilian goods than ever before and coming out with more wealth, more technology, and more plain human welfare, than any other nation on the face of the earth.

"The strength of this American economy depends on individual character, the character socialism takes away. You don't have to have character to be a communist. You just memorize the party line and take care not to deviate lest you liquidate. You don't have to have character to be a fascist. You just march along in ranks singing your silly song, wearing your silly feather or cap or Ku Klux Klan regalia, overcome by somebody else's false emotion. But you do have to have character—and science and freedom, too—to be democratic and self-governing in the deadliest world that ever was, with Russia and the split atom to be contained. You have to have the character to be honest, to be morally responsible, to be capable of aggressive appreciations, to live dangerously, and to have faith in the way of America and the future of the world."

So spoke John Temple Graves, well-known lecturer and widely-read columnist, at the Annual Banquet of the S. C. Medical Association, at Myrtle Beach on the evening of May 16th.

The sample quoted was a part of the thought-provoking address which, unfortunately, we are unable to reproduce in full. Mr. Graves' remarks demonstrated his wealth of information on and close observation of the significant events of the day, and the sound thinking which he applies to their analysis. Mr. Graves, one of the best-known Southern columnists and speakers, writes a daily column which appears in twenty-five newspapers in the South. A resident of Birmingham, Alabama, he has a true understanding of the Southern viewpoint and speaks with authority on subjects of public interest in the South.

The manifest interest and enthusiasm of his audience at Myrtle Beach attested the wise judgment of the Committee in his selection as the speaker for the occasion.

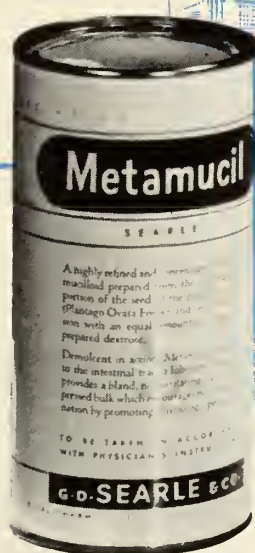
ANNUAL REPORT OF CHAIRMAN OF LEGISLATION COMMITTEE OF THE WOMAN'S AUXILIARY

The report of the Chairman of Legislation of the Woman's Auxiliary to the South Carolina Medical Association is in line with the program presented by Mrs. Edgar E. Quayle, Chairman of Legislation of the Woman's Auxiliary to the American Medical Association and with the objectives outlined by the National Education Campaign of the American Medical Association. Interest in medical legislation was stimulated in the counties through the tireless efforts of our State President, Mrs. A. F. Burnside, who in her visits to our twelve county units explained the legislative work and objectives in detail and urged active participation by all members.

During the summer of 1950 the entire State Auxiliary was alerted by telegram, telephone and by postal card reminders to vote in the Democratic primary elections and to support only those candidates who were actively opposed to compulsory health insurance and any other form of Government-controlled medicine. It is felt that one candidate in particular, an aspirant for Congress and a man not in sympathy with the policies of the American Medical Association, was overwhelmingly defeated largely through the efforts of the Medical Association, the Medical Auxiliary and the people whom they were able to influence.

Various educational methods were used to stimulate interest in fighting compulsory health insurance. Without the able assistance of the National Education Campaign this work would not have been possible. Several counties supplied local radio stations with talks prepared by the National Education Campaign to be used by their personnel at appropriate times. Greenville County Auxiliary held an open meeting in March. Members of local organizations were invited to hear Mr. M. L. Meadors, Director of Public Rela-

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SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

tions and Counsel for the South Carolina Medical Association, speak on compulsory health insurance. The members of the Charleston County Auxiliary were fortunate in obtaining Mrs. A. F. Burnside, State President, as a speaker on compulsory health insurance at one of their early fall meetings. Richland County Auxiliary sponsored two radio programs in connection with the observance of Doctors Day. A thirteen-minute talk, entitled "Medical Progress or Medical Poverty" was presented by Dr. R. W. Ball of the State Health Department. A three-minute talk, "The Meaning of Socialized Medicine" was presented by Mrs. Manly E. Hutchinson, Chairman of Legislation. Two hundred cards advertising these programs were mailed to labor leaders, welfare workers, service clubs, civic organizations and other clubs.

Another educational feature of the Richland County Auxiliary was the program at which Mrs. Mary McGinn Taylor of the National Education Campaign appeared as guest speaker. Invited to attend a luncheon as guests of the Auxiliary to hear Mrs. Taylor in November 1950 were all South Carolina Auxiliary county presidents, and county chairmen of legislation and leaders of the following local women's organizations: Woman's Club, American Legion Auxiliary, Young Women's Christian Association, Garden Club Council, Columbia Chapter of the American Association of University Women, League of Women Voters, Second District President Parent-Teacher Association, State President Parent-Teacher Association, State Regent Daughters of the American Revolution, State Parliamentarian United Daughters of the Confederacy, State President South Carolina Federation of Women's Clubs, and others.

During the week of October 8, 1950 our twelve county auxiliaries cooperated with the National Education Campaign of the American Medical Association by means of a state-wide distribution of pamphlets and literature on compulsory health insurance. Thousands of pieces of literature went out with orders from drug stores and with books from the public libraries. Pamphlets were left for distribution at school libraries, beauty parlors, barber shops, hotel lobbies, banks, grocery stores and with various civic clubs and other organizations, particularly Parent-Teacher groups.

An extensive drive for endorsements against compulsory health insurance was conducted. Only women's organizations were approached. Counties participating in this work had their methods individually approved by local medical societies. Richland County Auxiliary made requests from one hundred and fifty local organizations. Greenville County Auxiliary made requests from twelve organizations and Edisto County Auxiliary from two organizations, making a total of one hundred and sixty-four requests. Charleston County Auxiliary did special work with the Health Councils of the Charleston Parent-Teacher organizations and were promised support by them at their State meeting. The response to our requests for

endorsements was not satisfactory, the cause being attributed to indifference and inertia on the part of organizations rather than to a feeling of sympathy for compulsory health insurance. Furthermore, local newspaper publicity on political medicine has not been broad enough to make the people sufficiently aware of the need for action.

Particularly aggressive work was done by the State Auxiliary with the South Carolina Nurses State Nurses Association, the South Carolina Congress of Parents and Teachers and with the South Carolina Branch of the American Association of University Women. The South Carolina State Nurses Association went on record only as "approving the Voluntary Plan in keeping with the Platform of the American Nurses Association." In view of the affirmative position taken by this Association, a second letter was written to the president, Miss Ruth Chamberlin. This letter was written at the request of Miss Audri Ursin of the National Education Campaign. We were requested to ask the Association's president to reopen the issue of compulsory health insurance at the Council meeting of The American Nurses Association. The Association president replied that her Board had reconsidered the original stand taken by their group and had decided to make no change. Furthermore, she was not granted permission to attempt to have the issue of compulsory health insurance reopened at the Council meeting of the American Nurses Association. A third letter was written to the Association's president requesting that each District in the State be allowed to take a stand either endorsing the original action taken at their State Convention or to recommend that the issue be reconsidered at the next State Convention. A reply from the president stated that the matter would be taken up again at the next Board meeting though "The fact that we do not word our thoughts in the negative but say the same thing in a positive manner is a right which we reserve as an organization."

Again our efforts with the South Carolina Congress of Parents and Teachers was exhaustive but unsuccessful. After numerous attempts to interest the State President in our cause, we decided the work must be done on a local level. Recommendations were received from three P.-T.A. groups in Columbia requesting that the State Congress place on their agenda for consideration at their annual convention resolutions against compulsory health insurance. These recommendations were introduced at a Second District meeting and immediately blocked by their State President, Mrs. T. J. Mims of Greenville. A report of this meeting was sent to National Education Campaign headquarters. A statement of policy by the National Congress of Parents and Teachers in regard to endorsements against compulsory health insurance was obtained for us from one of the directors of their National office. This information was forwarded to Mrs. Mims and other State P.T.A. leaders. An attempt was then made to have resolutions presented for approval to the Executive Committee of the State



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Congress by their Chairman of Legislation, Mr. A. C. Flora. Mr. Flora requested that information be given him on the constructive work being done in the state for the medically indigent and work being done to increase the number of physicians in South Carolina. This was done, material being secured from Dr. O. B. Mayer, Chairman of the Council on Medical Services, from Mr. M. L. Meadors, Director of Public Relations and Counsel for the South Carolina Medical Association, from the State Board of Health and from the National Education Campaign. After a careful study of this material, Mr. Flora agreed to have the presentation made to the Executive Committee in his anticipated absence by Mrs. Paul Leonard, who all year had been working in our behalf. The recommendation was forcefully presented by Mrs. Leonard. Mrs. Mims immediately said that the South Carolina Congress could take no action on the matter. She was supported by the Executive Committee. The Greenville P.T.A. had been sent a generous supply of literature (P.T.A. Kits) for distribution at the general meeting.

The results of our work with the South Carolina Branch of the American Association of University Women was also unsuccessful. Personal as well as form letters and informative material were sent to the State President, the Chairman of Legislation and to each of the District Presidents. Personal contacts were made with key persons in the organization. A generous supply of A.A.U.W. Kits prepared by the National Education Campaign was presented for distribution at the general meeting. Our request was presented at the State Convention, but no action was taken.

The South Carolina Medical Auxiliary owes a debt of gratitude to Mrs. Mary McGinn Taylor and to Miss Audri Ursin of the National Education Campaign for their active work with the leaders of these organizations and for the material with which they so generously supplied us at the State Conventions. Though we were unsuccessful in obtaining resolutions from these organizations this year, we feel that much valuable work has been done in an educational way and that perhaps the seeds have been sown for action at a later date.

A communication from the State Regent of the South Carolina Chapter of the Daughters of American Colonists informs us that the State Chapter automatically endorses the action of the National organization, which has already taken favorable action. An offer was made by the State Regent to request that the three State Branches go on record. This offer was gratefully acknowledged.

A request has also been made that a study of compulsory health insurance be made by the South Carolina Council for the Common Good, a legislative study group with a membership of 2,000,000 persons. This request is under consideration and will more than likely receive favorable action, according to their president.

A request has also been made that a study of compulsory health insurance be made by the Columbia League of Women Voters and the same request will be made of the State League as soon as that group has been fully organized.

Resolutions have also been requested from the South Carolina Dental Auxiliary, from the South Carolina Pharmaceutical Auxiliary, from the South Carolina W.C.T.U., from the South Carolina Farm Women, and other groups.

Endorsements have been received and acknowledged from the following State organizations during the past year: The Garden Clubs of South Carolina (Executive Committee) with a membership of more than 8000 members, South Carolina Chapter of the Daughters of 1812, South Carolina Chapter of the Daughters of the American Revolution.

Endorsements from the following local organizations have been received and acknowledged: the Iris Garden Club, the Nibiscus Garden Club, the Grape Myrtle Garden Club, the Eau Clair Music Club, the South Carolina Baptist Hospital Alumnae, City Union of the Kings Daughters and Sons, Columbia Chapter of the United Daughters of the Confederacy, the Home Arts Club, and recommendations from the A. C. Moore P.T.A., the McMaster P.T.A. and Brennen P.T.A.

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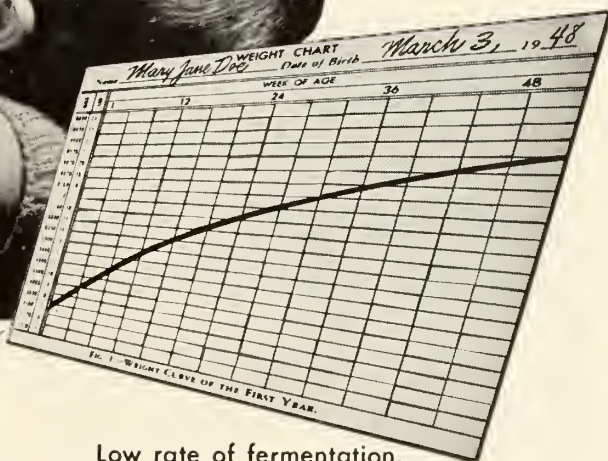
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As chairman of legislation I attended a meeting of the South Carolina Council for the Common Good and the South Carolina White House Conference.

Quarterly reports on the progress of the work of the Committee on Legislation and reports on the status of socialized medicine were contributed regularly to the "Bulletin" of the South Carolina Medical Auxiliary and to the "Journal" of the South Carolina Medical Association.

Copies of this report have been mailed to the Chairman of Legislation of the Woman's Auxiliary to the American Medical Association, to the National Education Campaign of the American Medical Association, to Dr. Julian P. Price, Editor of the "Journal" of the South Carolina Medical Association; to Mr. M. L. Meadors, Director of Public Relations and Counsel to the South Carolina Medical Association; to Dr. O. B. Mayer, Chairman of the Council on Medical Services for the South Carolina Medical Association.

Respectfully submitted,
Mrs. Manly E. Hutchinson
Chairman of Legislation

THE TERM "SOCIALIZED STATE"

The manner in which members of the Medical profession, including officers of the American Medical Association, are leading the way toward sound thinking on the most vital internal problems of this country today, is strikingly typified in a recent exchange of correspondence between Dr. Elmer Henderson, A. M. A. President, Mr. Oscar Ewing and others. The discussion revolved around a publication prepared several years ago for the Federal Security Administration and recently distributed again.

The campaign to maintain the free Democratic state is being waged by the Medical profession in the only sound manner in which it could be waged—through the process of education of the people of this country, including some of its educational and political leaders. Because it illustrates this point so aptly, we are quoting in full below the recent letter from Dr. Henderson to Mr. Edward Parsons of the George Warren School of Social Work of Washington University.

May 21, 1951

Mr. Edward Parsons, President
Social Work Club

George Warren Brown School of Social Work
Washington University
St. Louis, Missouri

Dear Mr. Parsons:

Your kind letter of April 26, regarding the F.S.A. booklet, "Common Human Needs," would have received an earlier reply except for the fact that I have been in Europe for the past several weeks.

I protested the statement: "Social Security and public assistance programs are a basic essential for attainment of the socialized state envisaged in a demo-

cratic ideology, a way of life which so far has been realized only in slight measure," solely on the basis of what it says specifically.

Let me say first that I appreciated very much the tone of your letter, and that I wholeheartedly agree with your statement that "man remains to a certain degree dependent upon his fellow men." However, I cannot agree that this is the connotation most thoughtful people today get from the controversial declaration concerning "attainment of the socialized state, etc."

The "politico-economic" construction, as you term it, unquestionably is the construction placed on the statement today by the majority of people. And since that is the case, though the term may mean something quite different to the earnest social worker, perhaps if it is necessary to use it, in these times it should be clarified or modified somehow to carry the precise meaning intended, and not the meaning currently attached to it.

I agree with Miss Helen Wright of the National Conference of Social Work, that "the sentence could quite easily have been rewritten to make the meaning clear." If the booklet, "Common Human Needs" is needed as a text book for social workers, I think that it should be carefully edited to eliminate such objectionable material before it is released.

I believe you will concur in the belief that social workers, like doctors, can do great injury when they are careless in diagnosis, or even careless in the words they use to report their diagnosis. All of us, particularly doctors, recognize the need of assistance to the unfortunate and most physicians give freely of their time and services to help those who are in financial as well as physical distress. However, it seems to me that social workers, perhaps more than any other group, need to be exceedingly careful that they do not further the dangerous philosophy of needless dependency on the Government in meeting individual problems.

The statement in question, frankly, was generally interpreted as favoring the socialized state, a system which is causing world-wide struggle, and deploring the fact that it has not made greater progress in our country. It had been so viewed in Congress before I spoke out on the subject, and was first brought to my attention as a result of criticism of the declaration there. I am enclosing a comment from the Congressional Record on the matter. Also copies of the final exchange of telegrams between Mr. Ewing and myself concerning the pamphlet.

The destruction of the pamphlets carrying the statement, by the way, was at Mr. Ewing's own volition, not in compliance with any suggestion made from here. We are, however, very grateful to Mr. Ewing for his disavowal of the principle which was being attributed to him as a result of the contested statement.

I was exceedingly shocked to read in a recent issue of the Louisville Courier-Journal that the American

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WEST COLUMBIA, S. C.

Association of Schools of Social Work, meeting at Atlantic City, had described Mr. Ewing's withdrawal of this booklet as "indefensible" and the result of the misunderstanding of the word "socialize." I believe the Association would serve the profession and our country well if it frankly admitted that a mistake had been made and set out to correct it. In this same action, the Association was quoted as saying that "the word, 'socialized', in this sentence has no political significance."

Quite to the contrary, to all thinking people today, the term "socialized state" has very real political significance.

I think perhaps public usage, public understanding and the changing world about us, has had a semantic effect here which your good association might well note.

Thank you very much for your letter.

Most sincerely

Elmer L. Henderson, M. D., President
American Medical Association
cc: Miss Helen Wright

MORTALITY RATES IN 1950

In 1950, a year of record low mortality, the Metropolitan Life Insurance Company paid \$288,000,000 to the beneficiaries of deceased policyholders. This sum exceeded by \$19,000,000 the disbursements in 1949 and was almost \$112,000,000 greater than those of only a decade ago. These increases represent the long-term growth both in the number of insured and in the average amount of Life insurance owned by individual policyholders.

The chronic diseases are responsible for the largest part of the death claim payments. Actually \$7 out of every \$10 disbursed last year was for deaths from the cardiovascular-renal diseases and from cancer.* The total paid on account of these diseases came to more than \$200,000,000.

The cardiovascular-renal diseases alone were responsible for well over one half of all the money paid in death claims by the Company last year. In fact, the diseases of the coronary arteries and the other diseases of the heart each ranked above every other cause of death. The sum paid on the deaths from the diseases of the coronary arteries and angina pectoris amounted to \$67,000,000, or 23 percent of the total in 1950. Ten years earlier they accounted for only 13 percent of all death claim disbursements. The increase in the relative importance of these diseases is due, in part, to the rise in the average age of the

*The specific causes used in this article are based on the tabulation of deaths according to the Fifth Revision of the International List of Causes of Death in order to preserve the comparability of the figures for 1950 with those prior years.

insured, but, in greater measure, to more frequent recognition and reporting on death certificates. The disbursements in 1950 for deaths from cerebral hemorrhage came to \$21,500,000 and for chronic nephritis to \$11,900,000.

Cancer ranks second to the cardiovascular-renal diseases with respect to death claim payments. In 1950 this cause accounted for disbursements of about \$48,500,000, or for 17 percent of the total, essentially the same proportion as in 1949. If the payments for deaths from leukemia and Hodgkin's disease are included, the malignant neoplasma as a group accounted for almost \$1 out of every \$5 paid on death claims last year. Diabetes follows cancer in the list of diseases, but in terms of actual amounts paid the gap between the two is very considerable. In 1950 about \$9,000,000 was paid on account of diabetes; this was 3.2 percent of the total.

The marked reduction in the mortality from pneumonia and influenza and from tuberculosis is clearly evident in the record. Despite the large increase in total disbursements by the Company in the past 10 years, the amounts paid for these diseases were considerably less in 1950 than in 1940. For pneumonia and influenza the proportion of all payments dropped from 3.8 to 1.6 percent in the 10-year period and for tuberculosis from 4.2 to 1.8 percent. Appendicitis, diseases of the puerperal state, syphilis, and the communicable diseases of childhood likewise showed large declines.

The payments on account of poliomyelitis vary from year to year in accordance with the annual fluctuations in the death rate. In 1950 the Company paid nearly \$500,000 on deaths from this disease. This compares with more than \$740,000 the year before and with only \$120,000 in 1940.

One dollar in every ten paid in 1950 was for deaths resulting from external causes. Payments for suicide came to \$5,000,000, for homicide to \$1,500,000, and for accidents to about \$23,000,000. For motor vehicle accidents alone disbursements were about \$10,700,000. Payments for deaths from enemy action appear again in the table of disbursements, amounting to nearly \$600,000 in 1950.

In the Ordinary and Industrial Departments \$4,300,000 was paid on policies which had been in force less than one year. In one third of these cases the policies had been in force less than three months.

The benefits of Life Insurance are further evident from the data on death claim payments according to the policyholders age at death. More than \$191,000,000 or two thirds of the total, was paid in 1950 to beneficiaries of policyholders who died before reaching age 65. Of this total, more than \$144,000,000 was paid for policyholders who died between the ages of 45 and 64 years and well over \$47,000,000 for those who failed to reach age 45.

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PUBLIC HEALTH NEWS

DIETETIC INSTITUTE

On Friday, April 13, 1951, The South Carolina Dietetic Association sponsored a Dietetic Institute to which all those in charge of dietary departments of hospitals, nursing homes, and children's homes, were invited. Miss Margaret Freeman, Consultant Dietitian of the State Board of Health, and Mrs. Anna Watson, President of the South Carolina Dietetic Association, were in charge of the meeting.

There were fifty-seven present at the meeting, which was held at the State Hospital in Columbia.

The guest speaker for the morning session was Miss Charlotte Mobley, Home Service Director, Duke Power Company, Charlotte, N. C., whose topic was "The Use and Care of Equipment." Miss Mobley said that cooking foods at too high a temperature, especially meats, ruins the flavor, and also wears out the stove more quickly. She also stressed the fact that it is a good idea to take good care of equipment more than ever now that it is apt to become harder to get and more expensive because of the war situation. Such simple matters as cleaning the refrigerator condenser with a small brush, having electric mixers serviced when they begin to drip oil, having heavy duty

equipment checked by a competent person, will prove to be wise measures, she said.

Miss Frances Eddy, President-Elect of the S.C.D.A., presided during the afternoon session.

Dr. Donald E. Lundberg, Head of the Restaurant and Hotel Management Dept., Florida State University, Tallahassee, Florida, spoke on "Personnel Management," especially "How to Give Orders." Some pointers he gave were:

1. Let the workers believe that they are creating something worthwhile and try to make the work set-up a pleasant situation.
2. Discuss changes with the workers before putting them into effect.
3. Never argue about any order at all.
4. Never use ridicule or sarcasm in giving an order.
5. The person giving the order must have the appearance of self-assurance and believe that the order is right.
6. Lighten up the work situation with some humor. Laugh with the employees—and at yourself sometimes.

Two army films on "Hospital Service Personnel Training" were shown.

The meeting was concluded with a tour of the State Hospital.

DEATHS

JOHN WILLIAM CARROLL

John William Carroll, 73, died at the Berkeley County Hospital on May 4, following an illness of three weeks.

A native of North Carolina, Dr. Russell was graduated from North Carolina State College and from the University of Maryland Medical School in 1903. After practicing in North Carolina Dr. Carroll moved to Russellville, S. C., where he engaged in general practice up to the time of his death.

Dr. Carroll is survived by his widow, the former Miss Mattie Eliza Dinn, one son and one daughter.

WILLIAM TERTIUS LANDER

Dr. William T. Lander, 90 died at his home in Williamston on May 15.

Born in North Carolina, Dr. Lander moved to Williamston in 1872 and made this his home until the day of his death. His father was the founder of Lander College, Greenwood.

A graduate of the Medical College of South Carolina (Class 1910), Dr. Lander was a general practitioner and up until his declining years was most active. Even after he had given up active practice he was keenly interested in medical affairs and on more than one occasion wrote interesting letters to the Editor of this Journal, commenting on the Ten Point Program and the work of the Association.

Dr. Carroll is survived by his widow, the former Miss Snie Rumph, two daughters and a son.

JAMES LEE YOUNG

Dr. James L. Young, 70, retired physician of Clinton, died on May 14.

A native of Laurens County, Dr. Young received

his education at Presbyterian College and University of Maryland Medical School (Class 1902). After receiving his degree he opened an office for general practice in Clinton and continued to carry on his profession there until his retirement five years ago.

Dr. Young is survived by his widow, Mrs. Annie Lou Abell Young, and one son.

NEWS ITEMS

Four Charleston surgeons were made fellows of the Southeastern Surgical Congress at the recent meeting held in Hollywood, Florida: Drs. F. H. Stelling, 3rd, C. B. Thomas, S. M. Wilkes, Jr., and David P. Reese.

Dr. Wm. S. Brockington, Greenwood, presented a paper, "Xeroderma Pigmentosum, Hereditary Factor in Skin Cancer," at the Southern Surgical Congress in Hollywood, Cal.

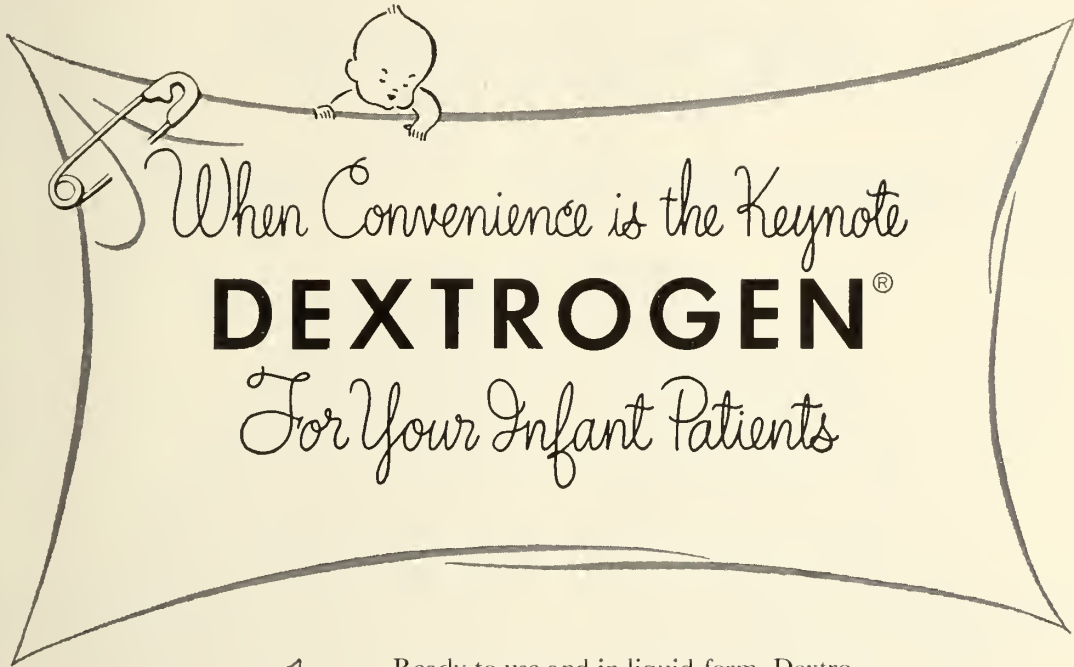
Dr. A. C. Alston, Greenwood, has recently started a two year residency in surgery at the Wycoff Heights Hospital, New York.

Dr. Harold Jervey has recently opened his office in Columbia.

Upon completion of his residency in surgery at The McLeod Infirmary, Florence, Dr. James W. Wideman will become chief of surgery at the James L. Martin Hospital in Mullins.

SOUTH CAROLINA SURGICAL SOCIETY

Dr. William H. Priolean, of Charleston, was elected president of the South Carolina Surgical Society at the opening session of its third annual meeting. Dr. C. R. F. Baker, of Sumter, was elected vice president. Dr. William C. Cantey, of Columbia, will hold over another year as secretary-treasurer.



Ready to use and in liquid form, Dextrogen is a concentrated infant formula, made from whole milk modified with dextrans, maltose, and dextrose. In addition, it is fortified with iron to compensate for the deficiency of this mineral in milk. Diluted with $1\frac{1}{2}$ parts of boiled

water,* it yields a mixture containing proteins, fats and carbohydrates in proportions eminently suited to infant feeding. In this dilution it supplies 20 calories per ounce.



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Spartanburg was selected for next year's meeting. New members elected last night were Drs. George Bunch, Jr., and DuBose Eggleston, of Columbia; Drs. Robert Thompson and Samuel Wilkes, of Greenville; Dr. William Byerly, Jr. of Hartsville, and Dr. William Armstrong, of Georgetown. This brings the membership to 34.

Dr. Melvin H. Knisely, professor of anatomy at the Medical College of the State of South Carolina, addressed the annual dinner, which followed a social hour. He was introduced by Dr. Kenneth M. Lynch, president of the college.

The scientific session consisted of the following papers:

Dr. Frederick E. Kredel, The Treatment of Myelomeningocele.

Dr. John M. Brown, The Use of Peridural Anesthesia in Thoracic Surgery.

Dr. William H. Prioleau, Rectosigmoid Anastomosis by Invagination in Chronic Inflammatory Diseases.

Dr. Daniel L. Maguire, Jr., Bile Peritonitis—Sequelae and Treatment.

Dr. Henry Mayo, The Rationale of the Short Affluent Jejunal Loop in the Performance of Gastric Resection for Peptic Ulcer.

Dr. Edward F. Parker, The Surgical Treatment of Congenital Cardiovascular Disease.

BIRTHS

Dr. and Mrs. Jenkins Mikell of Columbia have announced the birth of a son, Pinckney Venning, on May 6, at the Columbia Hospital.

Dr. and Mrs. P. F. LaBorde of Columbia, are also being congratulated upon the birth of a son, born April 19.

WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. A. F. Burnside, Columbia, S. C.

Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.

ANNUAL REPORT OF WOMAN'S AUXILIARY TO THE SOUTH CAROLINA MEDICAL ASSOCIATION 1950-1951

As the Auxiliary year 1950-51 comes to a close, it is with mixed emotions that the President relinquishes the duties of her office. A keen awareness of the responsibility of leadership and guidance to such a fine organization and the confidence that the presidency carries have been an inspiration to greater effort. The welfare of the Auxiliaries has been foremost in my thoughts and actions during the past year. The President and the President-elect have worked very closely in the interest of the Auxiliary and it is satisfying to know that my successor will have your interest at heart. It has been a good year and your President is happy to review some of your many accomplishments.

South Carolina is organized in accordance with the national plan. We have 580 members (24 members-at-large), comprising thirteen sectional units. Nine of which are County Auxiliaries and four are District Auxiliaries. We are proud to announce the organization of a new County Auxiliary, The Woman's Auxiliary to the Newberry County Medical Society.

The State President has kept in close touch with the work of the County Auxiliaries and discussed with the individual auxiliary topics of special interest to that group. Twelve County Auxiliaries were visited during the year. The kind invitations and the many courtesies shown the State President during these visits are deeply appreciated.

A special guest of the State Executive Board in October, 1950 was the President of the Woman's Auxiliary to the Southern Medical Association. Interest in plans for the year's work was shown by the excellent attendance of 33 members, including many past presidents.

South Carolina was represented by the President and President-elect at the Conference of Presidents and Presidents-elect in Chicago in November, 1950. Because of the emphasis placed on Public Relations in South Carolina, your President was asked to serve

on the Public Relations panel at this Conference. A review of this talk was published in the December issue of the National Bulletin. Many worthwhile contacts with national and state leaders were made and much valuable information was disseminated to the State Auxiliaries. The program of work outlined at the Conference has been reflected in the activities of the State and County Auxiliaries. You have heard the excellent reports of the officers, committee chairmen and county presidents and from these reports your President is proud to review some of the outstanding achievements in auxiliary work this year.

MEDICAL LEGISLATION: Due to the current hazards of medical legislation and to the emphasis placed on the importance of this field by national and the medical profession, we have been especially active in this work. The program of medical legislation was in line with the program presented by the National Legislative Chairman and the objectives of the National Education Campaign of the American Medical Association. All County Auxiliaries were informed of the status of medical legislation throughout the year. An ardent and extensive campaign against compulsory health insurance was continued and many requests were made for endorsements. Radio talks were given by our State Legislative Chairman and members of the medical profession to stimulate interest and action in the fight against socialized medicine. Notices of these radio programs were mailed to 200 labor leaders, welfare workers and leaders of civic organizations. Talks were made to lay groups and County Auxiliaries by the President and auxiliary members. Excerpts from these talks were published in the newspapers and in the Secretary's Letter No. 173 of the American Medical Association. One of the largest auxiliaries secured Miss Mary McGinn Taylor, of the Women's Division of the National Education Campaign, as a speaker. All County Presidents, Chairmen of Legislation and leaders of women's organizations were invited to hear her talk on "Socialized Medicine—A Sellout of the Country's Future." Endorsements or recommendations were received from twelve local organizations and the following state organizations: The Garden Clubs of S. C., S. C. Chapter of the Daughters of 1812, and the S. C. Chapter of

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the Daughters of the American Revolution. Particularly aggressive work was done with the S. C. Nurses's Association, the S. C. Congress of Parents and Teachers, and the State Branch of the American Association of University Women. The results were favorable only from an educational standpoint. The untiring and relentless efforts of our State Chairman of Legislation directed by the Women's Division of the National Education Campaign are largely responsible for the excellent part South Carolina has played in the fight for freedom of medicine.

PUBLIC RELATIONS: Your State Auxiliary was represented by the President or an appointee at the following eight state meetings: Nurses's Association, Council for the Common Good, Heart Association, Mental and Social Hygiene Society, Tuberculosis Association (one auxiliary member on the State Board), National Foundation of Infantile Paralysis, White House Conference for Children and Youth, and the Academy of General Practitioners. Your President has been asked to serve on the Committee of Resolutions at the National Convention in Atlantic City in June. At this meeting, a report of the State Auxiliary will be given. The State Chairman of Public Relations stressed an adequate civil defense program. An active nurse recruitment campaign was conducted throughout the state. Each County Auxiliary contributed to the educational, financial and social welfare of the nursing profession. Two County Auxiliaries give nurses's scholarships. Each County Auxiliary was asked to choose and carry out the health project most suited to the needs of its community, thus taking care of the most urgent needs of the community while providing a more varied health program. The highlight of many County Auxiliary programs was health talks given by outstanding leaders in their chosen fields. Time will not permit the covering of all health programs, however, some of the most important are: The presentation of an Institute on Human Growth and Development, the participation in work of the South Carolina Red Cross Blood Center (one auxiliary has 58 volunteers in this service), the purchasing of health bonds, child health and juvenile delinquency work, V. D. and Cancer Detection Clinics, assistance to indigent doctor's family, participation in all philanthropic drives and maternal welfare. Orientation courses were given by many auxiliaries.

NATIONAL BULLETIN: The value of this periodical as a channel of expression and an exchange of ideas has been emphasized. The use of the Bulletin for reference material has been encouraged. There are 86 subscribers and many more readers in our state.

TODAY'S HEALTH: We have secured 113 subscriptions. This magazine appears in many doctor's and dentist's offices, school libraries, and homes. One County Auxiliary can boast of a 100% subscription record this year.

STUDENT LOAN FUND: This fund was set up for the medical education of sons and daughters of deceased physicians in South Carolina. A balance of \$6,437.71 is on hand; \$3,330.00 of which is invested in series "F" government bonds.

STUDENT NURSES'S LOAN FUND: This fund was established two years ago to assist girls desiring

training. Two girls are using this source of aid this year for the first time. \$1,495.25 is reported in the treasury. This fund has proved an excellent stimulus for nurse recruitment.

HISTORY AND ARCHIVES: This year's record shows 55 biographies of deceased South Carolina physicians, making a total compilation of 507. 29 of the 55 were from one County Auxiliary. A History of the Woman's Auxiliary to the South Carolina Medical Association has been written and will be placed in state and national archives. Papers pertaining to research and romance of medicine have been written by auxiliary members and placed in state and southern archives. A permanent file for the preservation of auxiliary records was purchased this year and placed in the Library of the Medical College of the State of South Carolina.

PUBLICITY AND PRESS: South Carolina has two organs of publicity, the State Auxiliary Bulletin and space in the Journal of the South Carolina Medical Association. These publications have printed articles from the national, state and county auxiliaries.

NEW COMMITTEES: For the first time a Finance Committee has been formed as a standing committee to evaluate our financial needs and to set up a proposed budget for the State Auxiliary. This budget, adopted by the Executive Board, was published in the Auxiliary Bulletin. A Committee of Instructions has been formed for the purpose of giving instructions concerning the duties and responsibilities of office to officer personnel and potential officer personnel. The chairman and members of this committee are appointed from the list of past presidents.

DOCTOR'S DAY: Appropriate recognition to the medical profession was given March 30, 1951, by all County Auxiliaries. Throughout the state, our doctors were honored by radio talks, newspaper editorials, banquets, luncheons, coffees, and boutonnieres of red carnations.

CONVENTION: The Twenty-Sixth Annual Convention is a success and your President wishes to thank our Convention Chairman and her able committees for their consideration of our comfort and pleasure, each doctor's wife for coming, and our National Guests for their presence and participation on our state program. Our thanks are also extended to the President and President-elect of the South Carolina Medical Association and the members of the Advisory Council who shared their Convention time with us. It is the desire of your President that South Carolina will be well represented at the National Convention in Atlantic City in June.

As I take my place among that grand group of Past Presidents, my appreciation is extended to each of you for the honor and privilege of serving as your State President. The degree of success that has been reached is due to the combined efforts of the Executive Board and the individual auxiliary member. It is my sincere hope that the Woman's Auxiliary to the South Carolina Medical Association has made a distinct contribution to the aims and purposes of the medical auxiliary program.

Respectfully submitted:
Roberta T. Burnside, Pres.



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Medical Morality*

W. R. TUTEN, M. D.
Fairfax, South Carolina

I suppose it is always a bit presumptuous for a physician to stand before a group of his fellow practitioners for the purpose of giving them his views on medical morality. After all, isn't it a fact that we all well understand their importance and practice them accordingly?

To this question, I wish I could say yes. It would be nice to know that every man and woman who wears the title, Medical Doctor, also carries the disposition of an Hippocrates. Despite our best intentions, however, we physicians need constantly to look upward to the summit of ethical perfection.

Mr. Webster of dictionary fame defines ethics as a "treatise on morals." I am sure that in the minds of many of us there are slight digressions from this definition. But in the main, I believe it is acceptable.

Extending Mr. Webster's meaning into the field of medicine, we come up with something called medical morality. Frankly, I like this way of terming the subject of my discourse better than employing medical ethics.

Ethics, to me, has a vagueness about it as though you can take it or leave it. Ethics seems to be pervaded with wispiness which seems to say "It is best that you follow the honorable path; but if you don't, you will suffer only an occasional twinge of conscience."

Morality, however, stands hard and firm. Medical morality means you have obligations to follow or get out. It doesn't imply choice, only that if you do not obey the mandate your profession places upon you, you are not really a physician.

That is why I shall speak about medical morality. For the medical profession does not mince with philosophic nuances when it comes to a doctor taking his patient's life or performing abortions. It accepts its traditional responsibilities which were formulated over 2400 years ago in Greece. Hippocrates, you will recall, devised a special oath which was used by all pretenders to the art of healing when they had completed their training.

Because this oath, which exemplifies the great sense of social obligation held by those Greeks, has come to us through our concepts of right and wrong we would do well to honor its provisions.

After the discontinuance of this praiseworthy vow, there is a void of information about the Oath until the Middle Ages when medical men took a similar oath. Today, in some American medical schools, the graduates are bound to declare their intentions of high medical morality by swearing to a comparable statement.

An interesting sidelight on Hippocrates reveals that though he existed, much of the work attributed to him by legend, really belongs to a number of physicians from the early Grecian days. The Hippocratic Oath, modern experts tell us, was an accumulative affair.

The same view is held concerning the ten books which bear his name. The medical ethics discussed throughout the "Precepts" and "The Law" belong to the genius of the times. And whether we regard Hippocrates as an individual or collectively, we still can appreciate the noble purpose possessed by the works bearing his name.

I have spoken of medical morality as an either-or proposition. You either follow the law or you don't. Actually, such an attitude does not reflect the best of Hippocrates. For the oath does not carry a single line of prohibition in it. Its positive approach announces simply and without inhibition that the physician's way of life is essentially noble, devoted to the practice of healing the afflicted. The good physician was one endowed by nature and seasoned in experience. His reward was fellowship in the Art, and some measure of good things in life.

At best we are good men with honorable intentions who seek to intervene between birth and death for a few score years. We recognize our human limitations, always hoping that research will bring more antidotes to disease and mental unhappiness. Generally, we try to live an upright life and carry into our profession a sense of vigilant morality.

*Presidential Address—Delivered at Annual Session, Myrtle Beach, May 16, 1951.

Last year, the convention of the American Medical Association decided upon a revised medical code of ethics. Its purpose is to protect the innocent from quacks and the like. Medical men from all income brackets and parts of the country worked together to formulate an active policy for the membership to follow. I would like to consider the major changes for a few minutes in order to bring out the fast, moral nature of medicine today. We are less concerned with basic principles applied according to the individual's discretion, as was Hippocrates, than we are with policy regulations for physicians to mutually police.

Here are the alterations:

(1) The physician is forbidden to enter into consultation with cultists of any sort if there is any implication of professional equality.

This means that aiding a chiropractor or an osteopath is ethical as long as they are not to be regarded as equals.

(2) Physicians are permitted to deliver public speeches, but the A.M.A. feels it would be wise to see that the matter discussed is first cleared through the county medical society.

(3) If a physician does not accept a consulting specialist's recommendations, he should call another consultation.

Previously, he had merely to state his reasons for changing. But it was found that the procedure often became confused with mixed perspectives emitting from the specialist and the practitioner.

(4) Under certain conditions a physician may now participate in a contract in which there is no free choice of physician.

This provision implies that contract practice in itself is not unethical. But if conditions are permitted which directly oppose the Principles of Ethics—or if they cause deterioration of the quality of medicine—the practice is definitely unethical.

(5) Physicians may not accept a patient who has been under care of another doctor for the same condition unless the former doctor has been formally dismissed.

Objections to this provision assert that it is not realistic, because no force can be brought to bear upon the public to dismiss one physician formally before taking another if there is not an inclination. And so, doctors have faced the uncomfortable position of either accepting patients of other doctors or turning them away. The latter goes heavily against his nature to want to do what he can for the alleviation of pain and for healing.

(6) Physicians are now permitted to make social calls on another doctor's patient as long as they do not discuss his health.

(7) It is every physician's duty to expose incompetent colleagues.

This poses a great problem to medical people, for who is to throw the first stone. Doctors bear about

the same attitude of the United States senators and congressmen who dislike heartily to put a member on the grill for his practices. I think some feel that revenge is quite possible by either him or his friends.

(8) Physicians are now permitted to report to law enforcement officers any knowledge of illegal activity by brother practitioners.

At one time such a matter as (i.e. an abortion ease) would be settled first by a committee of responsible physicians. Undoubtedly, a certain number of practitioners got out of difficulty brought on by illegal practices simply by promising good behavior.

(9) The physician no longer must counsel the public on sanitary police, public hygiene and legal medicine.

This provision was originally effected at a time when doctors were far more scarce. Today, the community is apprised of its medical needs by any number of sources, the county medical society being quite prominent.

(10) Physicians do not have to enlighten public availability on schools and prisons.

Again, this provision has grown obsolete because of the improved information sources. Though yet a staunch pillar in local society, the doctor does not need to possess the overall functions he did fifty years ago.

Medical ethics, or morality, in the modern sense extends much farther in the relationship between physicians than it did during the time of the early Greeks. Hippocrates spoke of little more than the feeling of brotherhood among the practitioners of the Art. We outline quite definitely the treatment a physician should accord his professional equal.

It is important that such a formula be spelled out deliberately, because we medical people conceive ourselves in a sort of dualistic way. First, we are brothers of the profession who primarily are concerned with bringing healthful living to humanity. Our main desire is cooperation.

With all these manifestations of the medical problem depicted in certain lines of endeavor we can easily understand the need for a more concrete code of behavior among medical people.

Second, we also are competitors. While we do not go out and hawk our good by advertising, "My bedside manner is unsurpassed," "Gallbladders aseptically removed," or "Bring me your baby and watch him gain," we do perform the same services and, therefore, must endeavor to woo patients. For this reason we need to describe an acceptable relationship in business which will be fair for all involved.

It is this very problem that currently causes debate, somewhat heated at times, between specialists and general practitioners. Many doctors feel that there is a lack of equality between themselves and the specialists. The specialist boards set rigid requirements, because as they explain, they want to protect the public

from incompetent people. Also they feel it is for the good of the profession itself.

Their critics assert that the philosophy which was held by the founders, that the public may be protected, has been altered to one of a more scientific approach. The specialist, it is said, has created his own credo, and he now seeks to create a dominant role for himself in medicine. He believes he should have certain privileges because he and his associates own special, superior faculties and character.

I believe there is something to the criticism. Certainly the medical world has tended to emphasize specialization, and it only follows that a new sort of morality will evolve. All ascendant groups, whether in politics, music or art, influence the making of new values. Otherwise they could not justify their own existence. In medicine, the same principle applies. If specialists are to be given a leading characterization, they will assume a dominating effect in medical thinking.

The general practitioner feels that justice and equality are synonymous. He wants to be given equal privileges and consideration by medical provisions. But the specialist believes equality of this sort promotes mediocrity. Why tune the medical field, he asks, to the notes of the physician low in capability? More individuality will permit quicker advancement in meeting the great problems medicine jointly faces.

The specialist has a good point. But individualism can very well lead to medical anarchy, if some sort of limiting control is not placed upon it. And that means a loss of morality. In a sense this trend is abetted by the American Medical Association's desire to give the right of decision to the county level.

History shows quite effectively how the loss of morality soon leads to punitive codes. As I have already stated, we have enough of the prohibition philosophy in our organized efforts to make medicine a high calibre. We want to retain as much as possible a morality which permits physicians to express themselves positively in the tradition of the old Greeks.

With a thorough morality conceived, we can temper this specialist versus general practitioner feud into a general understanding which assigns all parties a laudable place. Like Hippocrates, then, we can regard our calling in its true light, rather than wage dissenting battles against our professional brothers of the Art.

I have dwelled upon the relationship of physicians, because I feel it is an important aspect of medical morality, one which does not receive the attention from physicians which it deserves.

It is my earnest conviction that we must experience a constant revitalization of the principles mentioned by Hippocrates and enjoyed by the medical world ever since. We no longer associate medicine directly with religious endeavor, but we can retain a spiritual awareness of our mission. We who deal in human life also touch the Hands of God. Let us be sure our own are not stained. In each of our hearts, let us covet the words of Hippocrates who said:

"While I continue to keep this oath inviolate, may it be granted to me to enjoy life and the practice of my art, respected always by all men; but should I break through and violate this oath, may the reverse be my lot."

Treatment of Infantile Eczema

KATHLEEN A. RILEY, M. D.
Charleston, S. C.

In a discussion of infantile eczema one is most likely to be confused by half-truths and part-truths. This is a result of the lack of a definitely known etiology or etiologies. Recently I asked a pediatric allergist which etiologic factor was considered most important in infantile eczema. He answered, "None. I believe that we need a completely new approach to this problem. It seems to me that we know very little and all lines of approach eventually lead into a blind alley." Perhaps this is somewhat too pessimistic, but it is the feeling of many who have worked on this problem.

In a discussion of the immunologic concepts which underlie atopic dermatitis, Rostenberg in 1947 presented an interesting working basis with the idea of an epidermo-dermal sensitization. He postulated that an atopic person has a dual hypersensitivity—dermal and epidermal, and that these patients have an immediate wheal-type sensitivity in which antigens and antibodies react, causing an alteration in capillary permeability that results in a wheal-type reaction. Something in addition to the wheal reaction, however, is necessary for the development of a dermatitis. In other words, there seems to be some X factor in the atopic person which allows for an interaction between the separate shock structures of the epidermis and the dermis.

Many classifications of infantile eczema have been made which are of some value in considering this problem. Objective clinical classifications of this type mean more to the dermatologist who thinks in terms of a clinical picture appearing seborrheic-like or contact dermatitis-like. These clinical pictures do overlap in the atopic patient and may simulate other dermatologic conditions. In consideration of the various clinical types I would prefer to outline the basic pathology seen rather than attempt a complicated classification.

First, there occurs simple erythema which may result in scaling as is often seen on a baby's cheeks. Papules and vesicles may develop which coalesce and rupture. This produces the exudative stage which may become crusted as is seen in seborrheic types. This may also become secondarily infected and produce impetigo-like lesions. The acute picture over a period of time may produce thickening, pigmentation, and lichenification of the skin. The predominant symptom is intense itching. The most frequently involved areas include the face, scalp, ears, and extremities. Unlimited variations of the areas involved and the type of lesions seen are possible and may occur at different times in the same patient.

With this brief introduction the remainder of this discussion will be devoted to the therapeutic ap-

proaches available, and an attempt will be made to evaluate each. In the routine handling of a patient it is important to know which available therapeutic measures are of everyday practical clinical value and application.

TREATMENT OF INFANTILE ECZEMA

1. **DIET:** At one time it was thought eczema was a simple problem and involved merely the uncovering of a food sensitivity. It is now known that certain antigenic foods may be a contributing factor by acting as a trigger mechanism. Symptoms can often be helped or controlled—if not completely cured—by avoiding known precipitating agents.
1. **MILK SUBSTITUTES:** If the baby is breast fed it may be wise to wean him. The patient should be first tried on evaporated milk as it is low in lactalbumin. If this causes trouble, it is probably due to the milk caseins involved. In this case milk substitutes should be used. Examples of these include: Sobee (Mead Johnson & Company) and Mull-Soy (Borden Company). Some infants may develop a sensitivity to soy or may be unable to tolerate the product. In this case Nutramigen (Mead Johnson & Company) or a baby meat diluted to bottle consistency may be used.
2. **BOILED FOODS:** It is believed by some that boiling milk reduces the antigenicity of lactalbumin. It is also thought that prolonged boiling of an egg reduces the antigenicity of the albumin. However, it must not be assumed that these foods are thereby rendered entirely non-allergenic.
3. **ELIMINATION AND CONTROL OF DIETS:** When foods are to be added to the diet it is best to start with one simple pure cereal as oatmeal or barley. One vegetable at a time should be added, beginning with carrots or beans. One fruit at a time should be added, beginning with apples or pears. If foods are added slowly at ten day to two week intervals, sensitizing foods may be detected by an intelligent parent.
4. **VITAMINS:** Aqueous forms are generally best.
5. **SKIN TESTS:** Intradermal or scratch test (preferred) may be a useful adjunct for those who are familiar with their use and evaluation. These tests, however, are probably not

necessary since the "proof of the pudding is in the eating." Closely observed dietary routines can give satisfactory results.

II. **CONTACTS:** It should be similarly noted that contacts with allergenic chemicals may act as a trigger factor. Determining the offending agent and avoiding contact with it offers the most practical and best method of approach to the problem. The agent may be any known substance. Some of these, however, more commonly sensitize and should be considered first in a search for the trigger agent.

1. **CHEMICALS:**

(a) **Baby Oils and Lotions:** The perfumes and ingredients incorporated in some prepared oils and lotions may produce a contact sensitization. Mineral oil is a safe substitute.

(b) **Plastics and Rubber:** In our modern life plastics and rubber are common offenders when used in the manufacture of panties, toys, bibs, toilet seats, bed sheets, and other objects because they occasionally produce a contact sensitization.

(c) **Insect Sprays:** DDT, Pyrethrum, and other insecticides may act both as primary irritants and sensitizers.

(d) **Drugs:** The local application of certain drugs frequently produces local sensitization. Especially is this true with certain of the antibiotics. Of this group, penicillin and streptomycin should not be used locally. The sulfonamides are also frequent sensitizers and should not be applied to the affected area.

2. **WOOL AND FEATHERS:** These may be sensitizing factors but they are more frequently irritating factors. Contact with woolen blankets, clothes, toys, and feather pillows may be avoided by the substitution of cotton or linen articles.

3. **DUST AND POLLENS:** These may be sensitizing agents and some relief may be obtained by the use of mattress and pillow covers or foam rubber substitutes. In the nursery only washable materials should be used including linoleum rugs. Pets should be avoided. Since it is impossible to live in a "glass house" if a dust or pollen sensitivity is definitely established, vaccines may be a worth-while procedure.

4. **HUMAN DANDER:** Much interesting work has been done demonstrating a sensitizing factor in human dander. However, at the present time it apparently has no clinical application.

5. **PATCH TESTS:** These may be useful to a

person who is familiar with their use and evaluation. They should be done with care and discrimination.

III. **PSYCHOSOMATIC:** The time invested in talking to the parent and child in explaining the importance of tension factors is well invested. The parents' insight into the necessity of a well regulated environment for the child will in many cases yield excellent results.

IV. **SYSTEMIC THERAPY:** Systemic therapy generally is not to be considered as specific treatment. Its purpose is to sedate and to relieve itching. One exception to this is the use of fatty acids. Some investigators have believed that a low fatty acid level in eczema patients was of etiologic significance. Therefore, the purpose of systemic fatty acid therapy was to correct this faulty metabolism.

1. **ANTIHISTAMINES:** These have been disappointing but they may be of some value during acute episodes. They are definitely worth a try.

2. **FATTY ACIDS:** In the form of lard or soy bean oil the unsaturated fatty acids have helped in the hands of some investigators. They are not recommended for routine use but may be a worth-while adjunct in resistant cases.

3. **SEDATIVES:** The oldest and still the best adjunct to therapy is "running sedation," either in the form of barbiturates or chloral hydrate.

4. **SALICYLATES.** These are worth-while, not only because of their analgesic effect but because they have a mild antipruritic effect.

5. **ANTIBIOTICS OR SULFONAMIDES:** These should be used internally if indicated for severe secondary infection.

V. **LOCAL THERAPY:** The basic principles of dermatologic therapy should be followed and varied according to whether one is treating an acute, subacute, or chronic lesion. In general all acute lesions may best be treated by compresses and bactericidal agents. Only in chronic conditions should stronger local applications be applied. Best results are usually obtained by the proper use of a few well understood therapeutic routines.

1. **BATHING AND CLEANSING:** It is best to avoid soap of all types in the acute stage. Starch baths or mineral oil cleansing can be done with safety. Certain special soaps as Dermolate Rx or Lowila Rx may be tried provided it is understood that these may also be irritating.

2. **RESTRAINTS:** Elbow splints, shirt restraints, and body straps are most important in preventing excoriation or subsequent skin damage. Elastic bandages can often be used

advantageously in making an occlusive bandage. The use of a mineral oiled plastic sheet on the mattress is useful for children who rub themselves raw on the bed covers.

3. **DEBRIDEMENT:** This is most important and can be done with oiled gauze or instruments. It should be repeated daily.
4. **BACTERICIDAL AGENTS:** For soaks and compresses potassium permanganate solution (1:4,000) may be used. For local painting, aqueous or tincture of zephiran Rx (1:1,000) or 1% gentian violet are excellent. Simple ointments with a low sensitizing index such as 3% ammoniated mercury or bacitracin are best. It is wise to avoid the local applications of drugs such as penicillin and the sulfonamides which may later be needed for internal medication.
5. **TARS:** Three per cent ichthammol in zinc oxide ointment is one of the mildest tar preparations that one can use. Regular crude coal tar for use in solid preparations or liquor carbonis detergens for liquid preparations are usually as efficacious as the specialized products and are cheaper and easier to obtain. They may be incorporated into simple ointment vehicles such as zinc oxide ointment, Lassar's paste, aquaphor, or carbowax. They may also be incorporated into simple liquid vehicles such as calamine liniment, Burow's solution, or simple rubbing alcohol.
6. **QUINOLINES:** Vioform Rx is the most popular quinoline product in this country. It may be incorporated in a lotion or ointment.
7. **ANTIPRURITICS:** Tars and quinolines as mentioned above are excellent. For compresses or soaks Burow's solution 1:20 or 1:40 can be used. Into any of the aforementioned vehicles $\frac{1}{4}\%$ menthol or $\frac{1}{2}\%$ phenol can be incorporated.
8. **X-RAY:** X-ray therapy should be completely avoided in small children.

COMPLICATIONS

PYODERMAS frequently result secondarily and may occur in the form of impetigo, infectious eczematoid dermatitis or furuncles.

ECZEMA VACCINATUM may occur in a child with atopic eczema who is either vaccinated for smallpox or contacts a person recently vaccinated. They will frequently develop a generalized vaccinia. Atopic children should not be vaccinated unless the skin is completely free of lesions. A generalized vaccinia is an acute illness and may terminate fatally.

KAPOSI'S VARICELLIFORM ERUPTION is now considered a generalized cutaneous herpes simplex which may develop in the atopic child. The atopic child may acquire the herpes simplex virus from fever blisters in a parent, nurse, etc. Clinically this picture may be similar to generalized vaccinia but it is frequently more acute and the mortality rate is higher.

ACUTE GLOMERULO-NEPHRITIS may develop from a secondarily infected atopic dermatitis. Many investigators feel that ten percent of the cases can be accounted for by skin infections as frequently seen in the secondarily infected atopic dermatitis.

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Adequate Diagnosis of Vulval Lesions*

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From infancy, when gonorrheal vulvo-vaginitis must be distinguished from the irritative vulvitis of pinworm infestation, to senility, when ulcerations must be discerned as benign or malignant, female patients present the physician with the problem and the responsibility of accurately and adequately differentially diagnosing lesions of the vulva. The tabetic grandmother whose chancre thirty years ago was dismissed as a "boil on the privates," and the pitiful patient in the cachectic terminal stages of carcinoma of the vulva whose early lesion, unbiopsied, was treated with Fuadin or with Sitz baths, offer convincing argument for the need of genuine integrity in diagnosing such cases. Only thus can specific therapy be administered.

And so let us consider a methodical means of diagnosing the more common and most important lesions. First, a full history is valuable since considerable differential diagnosing can be done according to the five chief symptoms of diseases of the vulva: (1) discharge, (2) bleeding, (3) pruritis, (4) pain, (5) urinary discomfort.¹

To go into more detail, *discharge*, when present in large quantity, usually comes from the vagina, although excessive quantities are sometimes produced by the vulva itself or by the glands which empty into it. A complaint of a greenish-yellow, creamy leucorrhea should arouse one's suspicion of acute gonorrheal infection; the color changes to white with chronicity. In the diffuse vulvitis of intertrigo and also of diabetes, the secretion is described as watery and whitish. Mycotic vulvitis is described by the patient as whitish and cheesy and hard to wash off.¹

When the patient reports *bleeding* its exact origin must be determined and its quantity. The greatest amount of hemorrhage comes from actual trauma to the vulva or from post-operative sloughing of vulval wounds. The next largest quantity comes from carcinoma.¹

The complaint of *pruritis* is your cue to question the patient further concerning leucorrhea and symptoms referable to the surrounding skin, the rectum and the urinary tract, and concerning such general systemic conditions as diabetes and jaundice.¹

Pain will not be a frequent complaint since it is limited to such acute infectious processes as abscess and cellulitis, to acute open sores as produced by chancroid, and to the deeper subpubic infiltrations of malignant tumors.¹

Urinary symptoms attend destructive processes in and about the urethra as syphilis and carcinoma and

in such cases are usually manifested as incontinence, or, in deep infiltrating processes, as retention. Frequency, burning and tenesmus are characteristic of gonorrheal urethritis, while burning alone may attend diabetes or any erosive condition about the vestibulum and labia minora.¹

Needless to say, careful study of the lesion by physical examination is essential. The following points must be noted: (1) the nature of the lesion—whether erythematous, pigmented, purulent, macular, papular, or ulcerative; and if ulcerative, the kind of base and the contour of the edges; (2) the distribution, noting especially any predilection for particular vulval structures; (3) the extent—generalized or discrete; (4) the nature of the associated exudate or discharge; (5) the presence or absence of inguinal lymphadenopathy, and if present, whether there is suppuration; (6) the effect of the vulval lesion upon the rectum.

The laboratory plays an important part in either the actual diagnosis or else the confirmation of the clinical diagnosis of vulval lesions. Almost no vulval lesion requires all the available laboratory tests for diagnosis, but almost all vulval lesions require more than one test for adequate diagnosis because of the frequency of mixed diseases superimposed one upon the other or else occurring simultaneously. This is exemplified by the coincidence of trichomonad and monilial infections, the mixed lesion of chancre and chancroid, the easily missed epidermoid carcinoma superimposed on granuloma venereum.

Here then is a logical scheme of laboratory diagnosis. In all non-ulcerative erythematous lesions of the vulva, a discharge should be sought both from the vulva and from the vagina. If present, this should be investigated for *Trichomonas vaginalis*, for yeastlike fungi, and for *Neisseria gonorrhoeae*.

Demonstration of the first two can be at least partially accomplished simultaneously by making a warm normal saline suspension of the discharge and examining a drop of it microscopically under low power. The trichomonads are easily recognized by their pear shape, their characteristic jerking movements, and their lashing flagellae.

In this same preparation, demonstration of mycelia is presumptive evidence of the presence of fungus belonging to the genus *Candida*, which includes the only pathogenic yeastlike inhabitants of the vagina.² Confirmation of the diagnosis and differentiation between the pathogenic species *Candida albicans* and the non-pathogenic species must be done by cultural methods. Since these for the most part are too complicated for routine office work, the clinician should streak slants of Sabouraud's agar or corn meal agar, either of which can be easily made, sterilized, and

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kept at room temperature in the office, and then send these inoculated slants to a suitable bacteriology laboratory by messenger or by mail. Cason and Armour³ in 1949 introduced a screen test for identifying the *Candidas* designed to be used as an office procedure. Two plates of dextrose agar adjusted to a pH of 5.6 are used, one plain and one mixed with 1:600,000 Gentian violet. Both are streaked with the suspected vaginal discharge. Yeastlike colonies developing within 2-3 days on the plain agar but concurrently failing to develop in this time on the dye medium are tentatively classified as *Candida albicans* or *Candida stellatoidea*. At the end of 4 days small lavender colonies of these two species usually appear on the dye medium. Other *Candida* species either appear on both plates within 2-3 days or else remain entirely absent from the dye medium. Cason and Armour feel that minute pyramidal lavender colonies appearing within 4 days on the dye medium are safely identified as *Candida albicans* if the culture is obtained from the vagina of a general gynecological patient with symptoms referable to mycotic vulvovaginitis, *Candida stellatoidea* being encountered most frequently in pregnant women. We have gone into much detail concerning the diagnosis of fungus infection because failure to properly differentiate the various species can result in an over treated vulvovaginitis which in itself is a formidable problem.

Smears should be made from the discharge or exudate and Gram-stained for *Neisseria gonorrhoeae*. It must be remembered, however, that in the female a final diagnosis of gonorrheal infection cannot be made simply from finding gram-negative intracellular diplococci in smears. This affords a presumptive diagnosis; final diagnosis⁴ requires growth by cultures on chocolate agar or other specific medium, then isolation of pure colonies by oxidation, and final differentiation of the gonococcus from related organisms by fermentation with sucrose, maltose, and dextrose.

For the physician situated far from a laboratory, gonococcus cultures present a problem in that the plates must be streaked within 2-3 hours of obtaining the specimen and at present there is no way of mailing cultures as can be done with fungus. In such cases, when cultures are indicated, it would seem wise to refer the patient directly to the laboratory. On the other hand, if the laboratory can be reached within the time limit, the specimen is probably best transported on a cotton swab immersed and stoppered in a culture tube containing Proteose Peptone No. 3.

Non-ulcerative, erythematous lesions warrant a test for glycosuria, and, when pigmented, a biopsy to distinguish between the benign lesion vitiligo and the precancerous lesion leukoplakia. If there is any serum to be obtained it should be subjected to darkfield examination since erythema is sometimes the earliest pre-erosive lesion of syphilis.

Ulcerative lesions of the vulva frequently bear an ominous significance and must be interpreted with

the greatest integrity. Their diagnosis is facilitated by selectively employing the following procedures: Directly from the lesion—(1) darkfield examination for *Treponema pallida*, (2) biopsy and cytological study for carcinoma, (3) smear and biopsy for the Donovan bodies of granuloma venereum, (4) culture for the Ducey bacillus of chancroid. Skin tests—(1) the Frei test for lymphopathia venereum, (2) the bacillary antigen⁵ skin test for chancroid. Blood tests—(1) complement-fixation test for lymphopathia venereum, (2) serological tests for syphilis.

As mentioned previously, almost no disease of the vulva would require all these aids for diagnosis. In private practice it is obviously desirable to require no more than the essential laboratory work. We consider the very minimum compatible with adequate diagnosing of any ulcerative lesion of the vulva to include: serological tests for syphilis, darkfield examination, biopsy, and the Frei test. These four procedures will clarify the differentiation of syphilis, granuloma venereum, lymphopathia venereum, and cancer. Furthermore, they fall within the capacity of every clinician whether he is near a large laboratory or not, since with experience darkfield examination and skin testing can be performed and interpreted in the office, and everyone is familiar with obtaining blood by venapuncture and tissue by punch biopsy in the office and mailing the respective specimens to appropriate laboratories. Other procedures are employed according to the dictates of one's clinical judgment.

The manner in which specimens are collected and dispatched to the laboratory for diagnosis may mean the difference between whether positive and negative reports are valid or not. In making a darkfield examination it is important that the lesion be cleansed of all contaminants and that clear serum be obtained from it by squeezing its base and rubbing its surface briskly with gauze sponges. Punch biopsies for Donovan bodies and for carcinoma should be taken from multiple sites, should be fairly deep, and should include a margin of healthy tissue whenever possible.

Material for cytological study may be collected in several ways. At this institution we have found that with lesions reasonably clean and free from secondary infection, the Papanicolaou technique is quite satisfactory. Important points are to spread adequate material evenly on the slides and immerse them immediately in the ether-alcohol solution before they begin to dry. If these are to be mailed, the slides are fixed in this solution for at least 15 minutes, removed and allowed to drain of excess fluid, overlaid with a thin coating of glycerin, and covered with a clean dry slide. Achenbach, Johnstone, and Hertig⁶ report a modification of the Papanicolaou stain with which glycerin is not needed in preparation for mailing. While these variations exist, clinicians should consult their pathologists concerning the method of preparation applicable to the method of staining to be used. We have also found that with dirty, bloody, or grossly

secondarily infected lesions, collection of material by the Gladstone⁷ technique with squares of Onkosponge No. 1 gives the best results. Our adaptation is to grasp the half-inch square sponge in the center of one of its flat surfaces, "scrub" the lesion with the opposite flat surface until thoroughly saturated, and then reverse sides so that the entire sponge is saturated. One of the advantages of this "sponge biopsy" is that for fixing, mailing, embedding, sectioning, and staining, it is handled as an ordinary tissue biopsy.

This paper has presented an approach to the diagnosis of vulval lesions. We conclude with one plea concerning therapy: Do not begin treatment on any vulval lesion until diagnosis has been established!

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Observations on the Effects of Priodax on Blood Sugar and Non-Protein Nitrogen

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CHEMICAL PROPERTIES AND ACTION

Priodax, beta-(4-hydroxy-3,5-diiophenyl)-alpha-phenyl-propionic acid, is a stable organic compound containing 51.38% iodine firmly bound. It is not a phenolphthalein derivative. It is practically insoluble in water, but soluble in alkali hydroxides, carbonates and bicarbonates. Priodax is supplied in .5 Gm. tablets and the usual dose given for cholecystography is six tablets, twelve to fifteen hours before examination. Physiologically, this substance is selectively excreted with the bile, with subsequent gall bladder concentration to render the organ suitable for x-ray. It is also claimed to serve as an index for the functional biliary system.

TOXICITY

Priodax tablets are fairly well tolerated by patients. Diarrhea is almost a constant finding as well as intestinal cramps. In certain batches of the dye, one finds the instance of side reaction greater than others. Vomiting is occasionally encountered and at times becomes so severe until parenteral fluids become necessary. Priodax is contraindicated in acute abdominal conditions, where a sensitivity to iodides is suspected and, in acute nephritis and uremia or in any condition with poor renal function. Albuminuria has not been reported although it no doubt actually exists. When the urine is tested with solutions such as Robert's Reagent, one finds an intense white precipitate due to the reaction of the sulfosalicylic acid present in the reagent with the excreted Priodax. Aqueous solutions of Priodax brought to a boil with acetic acid yield no precipitate. Since a considerable portion of Priodax is excreted in the urine, false positive reactions to albumin will result with the usual albumin test. Red blood cells and casts are occasionally encountered. These findings usually disappear within twenty-four to forty-eight hours following the administration of the dye.

PREVIOUS REPORTS

Rossien¹ reports little or no change in the blood sugar and N.P.N. following the administration of Priodax in the indicated dosages. In his study there was a slight increase in the blood sugar in ten cases and a decrease in four. The N.P.N. was slightly increased in four patients and decreased in ten. The average blood sugar before the administration of the dye was 104.7 mgm. and afterwards 106.7. The N.P.N. was 36.1 mgm. before and 35.6 afterwards. These studies were presumably done on hospitalized patients.

METHOD OF STUDY AND RESULTS

In our observation on a series of nine patients, three of which had definite gall bladder pathology, we obtained slightly higher figures. These studies were made on out patients. A fasting N.P.N. and blood sugar was done twenty-four hours before the administration of the dye. The patient was given six tablets to be taken with a fat free meal at six p. m. the evening before the study. From then until nine a. m. the following morning they were allowed nothing but water. At nine a. m. blood was drawn from the vein. The method of Folin and Wu was used for determining the blood sugar and N.P.N. All studies were done by the same technician and the results read with a Leitz Photo Electric Colorimeter. The average fasting blood sugar was 115 mgm. and N.P.N. 36 mgm. After the administration of the dye the average blood sugar was 153 mgm. and the N.P.N. 39 mgm. The average increase in the blood sugar following the administration of the dye was 38 mgm. and the N.P.N. 8. A break down of these cases is shown in Fig. 1. In several cases which showed an exceptional rise in the blood sugar a second determination was done twenty-four hours later. These had returned to their normal limits indicating that the dye was possibly the precipitating cause.

SUMMARY

Nine cases were presented to show the effect of Priodax on the blood sugar and N.P.N. These showed an average increase in the blood sugar of 38 mgms. and in the N.P.N. of 8. In several of these patients with unusually high blood sugars, determinations were made the following morning and showed normal values.

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FIGURE 1

	FASTING						
	NO PRIODAX		PRIODAX 6 tablets				
	N.P.N.	Blood Sugar	N.P.N.	Blood Sugar			
1	31	123	45.5	208	Stones in gall bladder		
2	34	117	48.5	198	Normal		
3	28	98	30	113	Normal		
4	35.5	90	41	108	Normal		
5	31	147	34.5	123	Normal		
6	27	95	29	103	Normal		
7	21.5	130	37.5	153	Stones in gall bladder		
8	39.5	113	41	130	Poor function of gall bladder		
9	32	118	42.5	138	Normal		
Average	31	115	39	153			

Heredity in Disease

A REVIEW

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According to Mendel's law, when two varieties of plants, differing from each other in one characteristic, are crossed, the hybrids preserve, for the greater part, the peculiarity of one or the other parent. The characteristic which persists is called the dominate; that which tends to disappear is called the recessive. Mendelian recessive traits may be transmitted in certain conditions of disease, among them, in chondrodystrophia foetalis, hereditary icterus, the remarkable form of fatal familial pitting edema described by Edgeworth, Milroy's disease, angioneurotic edema, hemophilia, hereditary spastic paraplegia, and others.

Fatal Familial Pitting Edema.—Edgeworth has described a remarkable form of fatal familial pitting edema occurring in apparently healthy children who are born at full term. The first case was that of a male who remained well until six weeks of age when he developed diarrhea and generalized edema, dying at the age of seven weeks. The second child, a female, began to have diarrhea when one week old, became generally edematous one week later and died in convulsions at the age of nine weeks. The third child, a male, had slight diarrhea toward the end of the third month, then became edematous over the entire body and died at the age of five months. The fourth child, a male, was well until one month of age when he developed diarrhea followed two weeks later by edema, first of the left hand, then of the face and subsequently over the whole body, death occurring soon after. The fifth child was observed at two and a half years of age and remained apparently healthy. The sixth child, a female, was healthy until the age of three months when she began to suffer from slight diarrhea to-

gether with swelling around the left eye followed by edema of both legs and hands; shortly thereafter death occurred. Two of the five children dead of this disease were examined post mortem but no evidence of nephritis was found in either one. In other words, five of six children born of healthy parents developed subcutaneous pitting edema at ages varying from one to fifteen weeks, death occurring after a period of from one to sixteen weeks. The disease described by Edgeworth is to be sharply distinguished from so-called sclerema or edema neonatorum. The latter affection occurs practically always in enfeebled premature infants. The edema, which pits with difficulty, almost always commences in the lower extremity, spreading upwards as it diminishes below, leaving the skin thin, dry and wrinkled. The temperature in these infants is often subnormal and death occurs within two to twelve days after birth.

Milroy's Disease.—Persistent hereditary edema, or Milroy's disease, usually occurs in families of neuropathic taint. In Milroy's original series 22 persons were affected among 97 individuals in six generations while, in the Wherrell family, the affection, which was present for more than sixty years, occurred in 13 of 42 persons in five generations. As a rule, the lower limbs are affected and the edema is of the non-pitting variety. Acute episodes may occur in which the affected limb becomes tense, swollen and reddish attended by such symptoms as rigors, fever, abdominal pain and vomiting. The diagnosis of Milroy's disease depends upon (a) the absence of all other recognizable causes of edema; (b) the familial and hereditary character of the disease and its association with

neuroses in the affected individual or in other members of the same family; (c) its extreme chronicity, the affection sometimes dating from birth and lasting for the remainder of life, at whatever period it starts; (d) the sharply defined boundary of the swelling and the tendency to affect segments of limbs rather than to follow the law of gravity, as in ordinary edema; for example, the leg may be edematous and the foot normal and (e) the tendency to produce hyperplastic changes in the skin and subcutaneous tissues of the affected limb, as in elephantiasis.

At Bellevue Hospital a twenty-four year old female patient was observed both of whose upper eyelids presented circumscribed, solid, non-pitting edema that had been present for seven years. In another case a boy of fourteen years presented solid edema of the upper lip that had persisted for a period of four years. In neither history was there anything to indicate that the affection was familial and whether it is to be regarded as a variety of Milroy's edema is doubtful (Symmers).

Angioneurotic Edema.—Angioneurotic edema (Quincke's disease) is an hereditary affection characterized by the occurrence of edematous swellings usually limited in extent and of short duration, sometimes associated with gastrointestinal symptoms. The edema appears suddenly and most frequently involves the eyelid or the lips or the cheek, although frequently the hands, the legs or the throat may be affected. In some instances there is a remarkable periodicity in the appearance of the edema, the attack coming on every day at much the same hour. In a family whose history was recorded by Osler five generations were affected, including twenty-two members, in two of whom death occurred as a result of laryngeal involvement. The gastrointestinal episodes consist of colic, pain, nausea and even vomiting. Sometimes the colic is of such intensity as to require morphine. The disease has affinities with urticaria, the giant form of which is probably the same affection. The condition described by Perrin as intermittent hydrarthrosis is regarded by some as the joint equivalent of angioneurotic edema. It is characterized by periodic swelling of one or several joints at intervals of weeks, sometimes months, the swelling occurring with great rapidity, occasionally accompanied by a sensation of "water rushing into the joint."

Familial Icterus.—Jaundice of the new born, or icterus neonatorum, occurs as a mild or physiologic process, or in a form that may be severe, even fatal. The mild variety is commonest in foundling hospitals where it occurs in from thirty to seventy percent of all new born babies. Jaundice appears usually on the first or second day, is of moderate intensity and disappears within two weeks. Some have attributed it to stasis of bile in the smaller ducts following compression by the distended radicles of the portal vein. Others believe that it is due to the rapid destruction of red blood cells that sometimes occurs soon after

birth. The severe form of icterus in the new born may depend on congenital syphilitic hepatitis, on absence of the common or hepatic duct, or on pyelo- phlebitis of the umbilical vein.

A familial form of icterus occurred in the remarkable group described by Glaister, in which a woman had eight children, six of whom died of jaundice shortly after birth; the mother of this woman had twelve children, all of whom became icteric shortly after birth, and a brother was the father of several children who also were jaundiced soon after birth. Minkowski recorded eight cases of acholuric icterus in three generations. Many cases of the Minkowski type have since been recorded and nearly all of them were in familial groups although both Chauffard and Osler mentioned examples without an hereditary basis. Finally, there are cases with marked enlargement of the liver, splenomegaly, anemia, dwarfism and slight jaundice that have been described in two or more members of the same family under the designation of Hanot's hypertrophic cirrhosis.

Hemophilia.—Hemophilia is an hereditary disease which is confined to the male sex and is characterized by immoderate hemorrhage occurring both in childhood and in adult life. The disease is transmitted through females but they themselves are not hemophiliacs. The cardinal symptom is an inherited tendency in males to bleed after injuries which would be of no moment in a normal person, the blood trickling until death occurs or there is spontaneous arrest. Bleeding may be external, internal or into joints. Although a majority of cases are traceable to trauma, spontaneous hemorrhages sometimes occur.

Amaurotic Family Idiocy.—In the majority of cases hereditary spastic paraplegia begins in children between the seventh and fifteenth years, affecting two or more members of the same family. It starts in the legs with the characteristic spastic gait and all the features of an ordinary spinal paralysis, later extending to the arms with or without such symptoms of multiple sclerosis as volitional tremor, nystagmus and scanning speech. A remarkable form of infantile spastic paraplegia has been described by Sachs and Tay and is now widely known under the eponym of Tay-Sachs' disease. It is characterized by psychic disturbances which appear in the first or second year of life and progress to total idiocy, by paresis and ultimately complete flaccid or spastic paralysis of the extremities, by increased or decreased tendon reflexes and by partial, followed by total blindness due to retinal atrophy preceded by changes in the macula. The latter were described by Warren Tay, an English ophthalmologist, and are known as the cherry-red macula. The choroid appears as a brilliant red spot through the fovea centralis surrounded by a contrasting white circle. In this form of infantile paralysis death usually occurs before the end of the second year. In 27 cases of amaurotic family idiocy originally collected by Sachs, 17 occurred in six families and all

were in Hebrews. Of 86 cases since reviewed by Heveroch 61 (71%) were in Jews.

Diabetes Mellitus.—In diabetes mellitus hereditary influences play an important role and cases are on record of its occurrence in many members of the same family. Naunyn, for example, obtained a family history in 35 out of 201 cases (17%). Semitic peoples seem especially prone to it; one-fourth of Freirichs' patients were Hebrews.

Chondrodystrophia Foetalis.—That the lesion variously known as chondrodystrophia foetalis, achondroplasia, fetal rickets and the like, is of great antiquity is attested by the numerous instances in which the disease finds representation among pottery and statuary of the ancients. The models of the Egyptian gods, Ptah and Bes, to be found in the Louvre, the existing statuette in caricature of the Roman Emperor Caracalla, the figures of the gladiator dwarfs in the service of the Emperor Domitian, as well as the subjects of certain paintings, notably by Velasquez, among them that of Sebastiano de Moro, a dwarf of the Spanish Court, are all recognizable examples of fetal chondrodystrophy. Historical interest attaches to the statement that, in the sixteenth century, Catherine de Medici revived the ancient custom of according gnome-like creatures a position in the social firmament of the Court, where they enjoyed unusual latitude of speech and action in the capacity of jesters, and emulating the Emperor Helio-gabalus, she sought even further to gratify her perverted taste by celebrating marriages between dwarfs with the purpose of perpetuating a stunted race comparable to the ethnic dwarfs of fact and fable. A survival of the same perversion consists in exploiting the chondrodystrophic dwarf in the circus of today that his deformed body may be held up to gibe, ridicule or vulgar curiosity. On the other hand, numbers of characters distinguished by action or intellect are known or are reputed to have been the victims of fetal chondrodystrophy, among them the author of Aesop's Fables; Philetas of Cos, tutor of Ptolemy Philadelphus and a poet and grammarian of renown; Licinius Calvus, a rhetorician; Atilla, King of the Huns; Wladislaus, called "Cubitalis," King of Poland, and noted for intelligence and military sagacity, and others of like account.

From an etiologic standpoint chondrodystrophia foetalis is scarcely less obscure than it was in the beginning and of the several factors which have been invoked to explain its origin none appears to be worthy of serious consideration other than that the condition is always congenital, completing its development in the first few weeks of intrauterine existence, that it preponderates in the female sex, and that it sometimes presents familial characteristics. In the latter connection Rischbieth, who has contributed an admirable paper to the eugenics of dwarfism, states that, while a chondrodystrophic parent usually begets normal children, heredity not uncommonly displays

itself in the shape of a deformed progeny. The pathogenesis is no less conjectural for having been referred to various types of intoxication, including infections and placental and glandular perversions.

The first really adequate contribution to the pathology of chondrodystrophia foetalis was made by Mueller, who observed the disease in certain forms of cattle and identified the changes with those previously noted in the human skeleton. Mueller's observations have since been extended to include certain short-limbed domestic animals, more particularly the dachshund, bull dog, Pekinese spaniel and Aberdeen terrier, but observation has shown that the likeness between them and the subjects of chondrodystrophia foetalis is fancied rather than real and that these animals merely typify combinations of different racial peculiarities brought about by artificial selection.

Individuals of the chondrodystrophic type, the majority of whom are still-born or die young, are deformed in certain bones which are conceived in cartilage and whose scheme of development is completed before the eleventh week of embryonal life; that is to say, the osseous complements of the base of the skull and the pelvis, the ribs and the long bones of the extremities. Consequently the child at birth is greatly abbreviated in stature, the head is large and the extremities, which may be crooked, are symmetrically shortened and thickened, varying between micromelia and phocomelia, and the cartilaginous termini are enlarged and nodular. The finger tips, which normally reach to the level of the upper third of the thigh, rest at the crest of the ilium or shortly below it. The hands are broad and pudgy and the middle digit is shortened. The fingers are roughly conical in outline and separate in pairs, combining with the outstretched thumb to form the main en trident of the French. The face is relatively small, the nose depressed at the root and the frontal eminences are exaggerated. These features unite with the large cranial vault to lend a pyriform outline to the face. The trunk is usually well formed and of normal size, although the abdomen frequently is protuberant. The skin, which develops out of proportion to the growth of the bones, is thrown into folds, especially over the joints and corresponding to the normal creases. It is often waxy in appearance and the subdermal tissues may be edematous or excessively infiltrated by fat. In those who attain adult life these characteristics are preserved, but as development proceeds the individual is endowed with muscular strength, sexual vigor and a degree of intelligence often noticeably in excess of the average. In addition to alterations in the bony skeleton, certain numbers of chondrodystrophic individuals present external signs that are suggestive of cretinism; so much so, indeed, that some observers have proclaimed that chondrodystrophia foetalis and infantile myxedema are manifestations of the same fundamental disorder, or, at all events, that the two conditions are closely related. The relationship of chondrodystrophia foetalis to cretinism was originally

insisted on by Mueller and by Eberth, both of whom pointed out that the so-called bull dog calf presents cretinoid appearances. Some years later Leblanc noted the association of chondrodystrophia foetalis and myxedema in calves and attempted to implicate the thyroid gland as the causative factor in the production of both the skeletal and myxomatous changes. It remained for Seligmann to demonstrate tangible changes in the thyroid gland of the bull dog calf and to establish the coexistence, in cattle at least, of chondrodystrophia foetalis and congenital myxedema. Seligmann examined specimens of Dexter calves born in Kerry. In all of them the skin was thick and coarse and the subcutaneous tissues were myxomatous. The head was large and brachycephalic, the forehead bulging and the nose despressed. The tongue was large and protruded from the half-open mouth. All the limbs were extremely reduced in length and their bones were stunted and provided with thickened, deformed, softened cartilages. In every instance the thyroid was irregularly lobulated and, on microscopic examination, the alveolar architecture was scarcely recognizable and the cells were arranged in clumps or branching columns. Colloid was practically absent and the gland was abnormally well vascularized.

As to the influence of the thyroid in the production or modification of chondrodystrophic foetalis in human beings, there is little to be found in the literature. Kaufmann, Legry and Regnault, and others have submitted the thyroid to histologic examination with negative results. In the same way Marie, Cestan and Christopher have failed to note beneficial effects from the administration of thyroïdin and thyroid extract. Symmers and Wallace have described a form of chondrodystrophia foetalis in which, in addition to the changes in the osseous system, there are modifications in the soft tissues that are attributable to pathologic defects in the thyroid gland. The modifications consist of thickening of the lips, cheeks and eyelids, the wings of the nostrils and the lobes of the ear, macroglossia, hypertrophied vulvae and myxomatous transformation of the subcutaneous and certain deep connective tissues, all of which, when combined with the large head and frog-like expression, the protuberant abdomen, prominent skin folds and pudgy extremities, fulfill the requirements for the diagnosis of cretinism. In the cretinistic variety of chondrodystrophia foetalis, the pathologic changes in the thyroid gland are those of a chronic productive inflammatory process resulting in replacement of follicles and diminution in the amount of colloid material.

CANCER

Edited by HENRY W. MAYO, Jr., M.D., Charleston, S. C.

CARCINOMA OF THE THYROID

CHARLES B. HANNA, M. D. AND
WILLIAM H. PRIOLEAU, M. D.

While carcinomas of the thyroid gland comprise less than 1 per cent of human cancer, their variable clinical behavior and complete unpredictability as to prognosis make them one of the most interesting types of cancer. It is now generally accepted that thyroid cancer seldom develops in other than a pre-existing diseased gland. As Lahey and Hare¹ have recently shown, 10.04 per cent of discrete adenomas are malignant when examined histologically. This fact is emphasized by a quotation from Ward and Hendrick:² "It is definitely established that pre-existing benign adenoma is the most important known etiological factor in the development of thyroid malignancy." It is estimated that at least 80 per cent of thyroid malignancies arise in fetal adenomas. Fetal adenomas are now generally accepted as being true neoplasms. Most other thyroid malignancies arise in the common nodular goiter.

During the past fourteen years (January, 1938

From the Department of Surgery and the Cancer Clinic of the Medical College of the State of South Carolina, and the Roper Hospital, Charleston, South Carolina.

through December, 1950), twenty-one cases of histologically proven thyroid cancers have been treated at Roper Hospital, Charleston, South Carolina. Sixteen of these were women and five were men; twelve were colored and nine white. The youngest was 26 and the oldest 88 when diagnosed. Although there were no children in this series of cases, carcinoma of the thyroid does occur in children. Dailey and Lindsay³ reported twenty-three cases of thyroid malignancy in patients under 20 years of age. Ward, Hendrick and Chambers,⁴ in their series of 112 thyroid cancers, found five under 20 years of age, and the youngest was 4 years old. Fortunately, as Hare and Newcomb⁵ showed, the prognosis in these cases can be favorable.

Warren's⁶ modification of Graham's classification of thyroid tumors has been used in this series. This classification is practical, both clinically and histologically. In many instances the pathologic report of thyroid cancer comes as a surprise to the clinician, and thirteen of the cases in this series were operated upon for what was thought to be a benign lesion of the thyroid, only to have carcinoma reported by the pathologist. Frozen section examination in the diagnosis of carcinoma of the thyroid gland is not applicable. At operation, the diagnosis of malignancy can be made from the gross appearance, only in advanced cases, and then not always without difficulty.

The tumors of low-grade malignancy are the pap-

illary cystadenomas and the adenomas with or without intact capsules, but with blood vessel invasion. Moderately active is the papillary adenocarcinoma which commonly arises from pre-existing adenomas. These tumors are characterized by papillary projections covered with cuboidal or polyhedral cells. These projections may lack well defined cell boundaries. Less common tumors of moderate activity are the Hurthle cell and alveolar adenocarcinomas. The carcinoma simplex and giant cell carcinomas usually indicate a malignancy of high grade.

The first and almost constant symptom presented is the recognition of a fullness or new growth of the neck. Twelve patients in this series complained of a mass or swelling in the neck as the first symptom, and all were aware of a new growth in the neck. Although aware of these changes, they waited from two months to as long as ten years before seeking medical advice. In all cases the patients listed the presence of a mass among their complaints while five patients had no other complaint than a mass in the neck. Less common complaints were weakness, weight loss, dysphagia, dyspnea, neck pain, hoarseness and nervousness. Most of these symptoms were associated with cases having advanced tumors. In the patients with multiple nodular goiter, mild symptoms of hyperthyroidism were present.

In every case, upon careful examination of the neck, there was found some form of thyroid enlargement. In only three cases was bilateral multinodular goiter present. In eight cases growths were far advanced, consisting of hard, fixed tumors in the region of the thyroid gland, and often extending into the supraclavicular spaces and posterior triangles of the neck. Emphasis is again placed upon the necessity of careful examination. By diligent and systematic digital palpation of the neck, nodules of very small diameter can be found. They are usually firm but may be cystic, freely movable or attached to neighboring structures, such as the trachea or esophagus, and in some cases may invade blood vessels or nerves. This extension and attachment explains the hoarseness, dyspnea, and dysphagia. These findings commonly are associated with more advanced tumors.

Other physical signs are associated with more advanced stages of malignancy. Five patients had dyspnea due to pressure on the trachea; three had dysphagia because of tumor pressing on the esophagus; and two had hoarseness due to recurrent laryngeal nerve involvement. In very advanced cases there may be distention of the neck veins and local metastases, with enlargement of the regional lymph nodes. Marked weight loss, pathologic fractures and lung and cerebral metastases are very late findings.

On account of the possibility of malignancy, isolated nodules of the thyroid should be removed intact with a good margin of surrounding thyroid tissue. In those cases in which the postoperative diagnosis of thyroid cancer is made in a discrete adenoma, subsequent

total removal of the involved lobe is urgently indicated. Roentgen therapy should follow the surgical excision.

In tumors where growth has exceeded the limits of the thyroid capsule, it is most likely that regional lymphatics are involved. These cases require complete excision of the involved lobe, the thyroid isthmus, and subtotal removal of the opposite lobe. It is our opinion that a radical neck dissection on the involved side should accompany the thyroidectomy. Roentgen therapy should follow this surgical dissection and extirpation.

Even far advanced cases with known metastases often can be offered relief from pain and discomfort. Subtotal excision of the tumor, especially for relief of tracheal decompression, can give complete relief from dyspnea. Roentgen therapy will often retard local growth to a marked degree, and should always be used after surgery.

Radioactive iodine¹³¹ has been used to treat six different cases in this series. There were five females and one male. All the females were past child bearing age, and we feel that ¹³¹I should be limited in its use to women unlikely to become pregnant. This is because the ovum might be exposed to radiation. Each case was given a test dose of 100 microcuries before therapeutic doses were given. In these cases the dosage varied from 4 to 32 millicuries of ¹³¹I. In one case with a pathologic fracture of the femur, there was great subjective improvement, and the patient was able to walk well with crutches; however, follow-up x-rays have shown little change in the fracture. In our experience, radioactive ¹³¹I is effective chiefly where metastases have occurred. For ¹³¹I to be effective the thyroid tissue must be actively functioning and need iodine. In carcinoma of the thyroid there is usually poorly functioning gland present. It is for this reason that we expect only limited value from ¹³¹I in the treatment of thyroid cancer.

Since establishing a histologic diagnosis, five patients have lived over five years. Six patients, from five months to eight years since initial treatment, are free of recurrence at this time. None of the twenty-one patients received preoperative roentgen therapy, but seven did have later roentgen therapy.

SUMMARY

During a fourteen year period ending December, 1950, twenty-one cases of carcinoma of the thyroid were seen in this clinic. An analysis of these cases has been carried out. The most favorable prognosis was found in cases not suspected of being malignant at the time of removal. Emphasis has been given to the importance of prompt excision of discrete thyroid adenomas. It is felt that radioactive ¹³¹I is of only limited value in the treatment of carcinoma of the thyroid.

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THE PRESIDENT'S PAGE

From time to time, your president will attempt to discuss on this page, which the editor has kindly assigned to him, matters of greater or less interest to the members of the association. An attempt will be made to make the discussions informative. However, no doubt he will deal at times with controversial subjects. At such times, he will try to state clearly his opinion, not with the intention of molding opinion, but rather to arouse thinking on the part of the reader, and to stimulate him to form opinions of his own.

There has been considerable criticism with regard to how the affairs of the Association have been run. No doubt some of this has been justified. Furthermore, although the management of the association has been modeled on a representative type of government, with duly elected representatives who are, or should be, responsive to the will of those represented, it has happened with us, as is true with units of our civil government, that the members at large have not always chosen their representatives well, and that their representatives have not been given an opportunity to learn of the views of their constituents.

Perhaps more criticism has been directed toward the council than toward either the officers or the house of delegates. Although the councilors are elected by the house of delegates, by custom they are nominated by delegates from their respective districts, and also by custom, the first man nominated is the man elected.

Although the councilors are association officers, they are also the representatives of the members in their respective districts. They should be selected with care, and they should be informed of views and wishes of the members in their districts. There is no reason why they should not be instructed by resolutions and discussions in the various district meetings.

As I have sat as a member of council during the past year, I have been impressed with the earnestness of its members, the absence of mass action, and the sense of responsibility which each man has had. No doubt council has made mistakes. No doubt, at times, their actions have not reflected the will of the members, but a study of the minutes of the house of delegates for several years past will show that almost every progressive step that has been made by the association has been initiated in council, and further, that very few recommendations made by council have been rejected by the house of delegates.

Government by council and the house of delegates is representative government. However, it is not in fact democratic government. Much of our legislation is not truly democratic. It approaches it when resolutions introduced in the house are deferred for later

action so that they might be studied. This is always true of amendments to the constitution, and is frequently true of other important proposals. However, such deferment is of little value, if the members do not avail themselves of the opportunity to study the proposals and do not voice an opinion concerning them. When they do not do so, they really have no just reason to complain of the action taken nor to charge ring or clique rule.

On another page in *The Journal* is a detailed proposal of certain changes I recommended in my address to the house in May. Its objectives are to make action by the house on important and controversial matters more democratic, to give an opportunity for every member of the association, in contradistinction to every delegate, an opportunity to express an opinion; to make the deliberations of the house more orderly and less hurried; to institute a system of reference committees, which will hold hearings on matters referred to them and which will attempt to reflect the will of the members of the association rather than the opinions of either the delegate or the committee proposing the resolution or that of the committee itself. I believe the proposals, if adopted, will accomplish those objectives. I believe that they will prove pleasant to work under, and I believe that they should be given a trial at the annual meeting next year. One newly elected councilor said, when he saw them, that they would effect the most progressive step that the association has taken in years.

Perhaps the chief objection to them is that their adoption will extend the length of the annual meeting one-half day, which will, for most members attending, mean that they will not return home until Friday morning. The annual banquet would be Thursday night. A councilor, if he attended the entire meeting, would be away from his practice five days; a delegate, one day less; and a member who was interested in the business to be transacted and the scientific program would be away four days. However, that is not too long for an annual meeting. Furthermore, the requirement, re-enacted in May, that all committee reports, committee recommendations and resolutions should be published in *The Journal* before the meeting, will make it possible for a member to know beforehand whether or not he wished to be heard on any matter to be taken up, and if it were impossible for him to be present, he would have an opportunity to discuss impending legislation with his delegates and his councilor.

Please study this proposal. Discuss it, if you will, in your county or your district societies, and let your councilor know how you react to it.

J. Decherd Guess

The Journal of the South Carolina Medical Association

EDITOR: Julian P. Price

Florence, S. C.

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JULY, 1951

THE COUNCIL

During the past year there has been considerable discussion, and at times criticism, of the Council of our Association. A discussion of the Council—its rights and duties under our constitution, its functions, its recent activities—would seem in order.

Article VI of our Constitution reads:

The Council shall consist of the Councilors, and the President, the Vice-President, the President-Elect, the delegates to the American Medical Association, and the Secretary of the Association, and the President of the S. C. Medical Service Plan.

Article VII of the By-laws outlines the duties of Council, as follows:

Section 1. The Council shall meet daily during the Annual Session and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Councilors. It shall elect a Chairman, Vice-Chairman, and a Clerk, who in the absence of the Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates. Five members shall constitute a quorum.

Section 2. The Council shall consider all questions involving the rights and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or of a component society, upon which an appeal is taken from the decision of an individual Councilor. An appeal from the decision of the Council may be taken to the House of Delegates.

Section 3. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

Section 4. The Council shall provide for and superintend the publication of the Journal of this Association and for such other publications as may be necessary. The Council shall appoint the Editor and such assistants as may be deemed necessary. The salary of the Editor shall be fixed by the Council.

Section 5. The Council shall receive the annual audit of the Treasurer and the report of the Secretary

and of the Editor and other agents of the Association and shall present a statement of the same in its annual report to the House of Delegates. At its annual meeting, the Council shall adopt a financial budget for the coming year.

Section 6. Between the regular meetings of the House of Delegates, the Council shall serve as the Executive Committee of the Association. In the event of a vacancy in the office of the Secretary or of the Treasurer, the Council shall fill the vacancy until the next annual election. In the event that the President and Vice President both die, or resign, or are removed from office, the Chairman of the Council shall assume the Presidency until the President-Elect is duly installed into office at the next Annual Session.

In brief, the functions of the Council are (a) to serve as the executive committee of the Association and to conduct its affairs between meetings of the House of Delegates, (b) to serve as the Board of Censors of the Association, (c) to supervise and be responsible for the financial affairs of the Association, and (d) to provide for the publication of our Journal and to elect the Editor. A further function, assigned to it by the House of Delegates but not incorporated into the Constitution, was to put our Ten Point Program into effect and to elect a Business Manager for the Association.

It was our privilege to first sit as a member of Council twelve years ago. At that time there was an annual and occasionally one additional meeting of the body during the year. The sessions were devoted largely to a hearing from each member of the Council as to the activities in his district and to a general discussion of medical problems which existed in the state and toward possible plans for their solution which could be presented to the House of Delegates for action.

In 1941, the Council suddenly found itself faced with a severe emergency. The clouds of war were imminent and a large number of physicians were volunteering for service with resulting depletion of medical care for the people of the state. Organizing itself into a special committee on military preparedness, which subsequently became the advisory committee to the state chairman of Procurement and

Assignment, the Council played a major role in determining which physicians should be declared available for military service and which should be declared essential for civilian medical care.

In 1944, our Association adopted a Ten Point Program and instructed Council to put it into effect. This was no temporary expedient but a long range program which necessitated careful planning and financial support. Acting in its role as financial agent of the Association, Council sponsored voluntary contributions and then an increase in annual dues to care for the situation. A Director of the Program was elected and his work was supervised by the Council.

Here are some of the phases of the Ten Point Program which the Council has sponsored and helped to put into effect during the past seven years—the establishment of the South Carolina Hospital Service (Blue Cross) Plan, the establishment of a State Health Council, the establishment of the South Carolina Medical Service (Blue Shield) Plan, the Medical College Expansion Program, a state wide hospital survey, a Speakers Bureau, the killing of a bill in the Legislature to change the present organization of the governing body of our State Board of Health, the placing of physicians in needed areas of the state, the Centennial Celebration of our Association in 1949, the improvement of our Journal, the printing of an annual directory, the publication of a history of our Association, setting the Association on such a sound financial basis that it was possible to lend the South Carolina Medical Service Plan \$10,000.00 with which to set up business, and to give \$10,000.00 to the National Medical Education Fund (earmarked for our own Medical College)—all of which came from our current expense account, without the necessity for drawing upon our reserve fund.

Two criticisms have been leveled at the Council during recent months. The number who make these criticisms are not great but their voices have been loud enough to carry some distance.

The first criticism is that the Council is doing too much, that it is usurping its powers. What a far cry this is from the criticism of earlier years when one was told that the Council was doing nothing. To us it is a sign of activity.

As we have read the constitution and the minutes of the House of Delegates, with its resolutions outlining further duties for Council (such as the implementation of the Ten Point Program), we do not believe, in all sincerity, that the Council has overstepped its prerogatives. It may be true that the Council has not kept the members of the Association fully informed as to what has been done—and yet the minutes of all meetings are published in the Journal.

The second criticism is that the Council has been unwise in some of its financial activities leading to unnecessary expense. To those who make this criticism we would ask that they compare the financial condition of the Association today with what it was

ten years ago. On Dec. 31, 1940 we had \$3,646.48 in our cash account and \$1,000.00 in our reserve fund. On Dec. 31, 1950 we had \$14,616.34 in our cash account, \$15,000.00 in our reserve fund, and a note for \$10,000.00 due from the South Carolina Medical Service Plan.

We would further ask these critics to consider the various activities and accomplishments of our Association during the past ten years (particularly during the past seven years since our Ten Point Program has been in effect) and to ask whether they have not been worth a monthly expenditure of only \$1.67 per member of the Association, (and this includes the Journal).

Misunderstandings have arisen and it is our sincere hope that this discussion of the Council will help to clarify the atmosphere. That the members of Council have made their mistakes we will readily admit, but we are convinced that they have been mistakes of the head and not of the heart. It has been our privilege to know every member of the Council intimately during the past twelve years and we can say without reservation that they have given of their best to the interests of the Association. Today, as always, they need the advice and constructive criticism of all our members and we hope that this will be given freely. We beg for them the loyal support and confidence of each and every member of our Association.

SUGGESTED OUTLINE AND AGENDA FOR ANNUAL MEETINGS SOUTH CAROLINA MEDICAL ASSOCIATION

Monday

2:30 P. M.—Meeting of Council

Tuesday

9:00 A. M.—Convocation House of Delegates

1. Remarks by President
2. Address by President-Elect
3. Reception of recommendations and resolutions from (a) Council, (b) Secretary, (c) Treasurer
4. Reception of recommendations and resolutions from (a) Chairmen of Standing Committees, (b) Chairmen of Special Committees
(All reports with their resolutions and recommendations will have been previously printed in *The Journal*. The reports will not be read—but only the resolutions or recommendations. The reports and recommendations will be referred to reference committees previously appointed—without discussion.)
5. New business—Matters of consequence requiring action should be in writing and where practical should have been printed along with other resolutions. These will be referred to reference committees.
6. Announcement of meeting places of reference committees.

12:00 Noon—House of Delegates rises and immediately sits as the Corporation of the South Carolina Medical Care Plan, the President of the Plan presiding.

1:00 P. M.—Adjournment.

3:00 P. M.—Reference committees meet

(Not only delegates, but all members of the association are invited and urged to attend and to participate in those meetings considering matters of particular interest to them.)

Wednesday

9:00 A. M.—Convocation House of Delegates

1. Reports from Reference Committees and action on recommendations.
2. Unfinished business.
3. Selection of meeting place.
4. Election of officers.
5. Presentation of new President-Elect and Vice President.

12:30 P. M.—Adjournment

1:00 P. M.—Alumni luncheon

3:00 P. M.—First Scientific Assembly

5:00 P. M.—Adjournment

Thursday

9:00 A. M.—Second Scientific Assembly

12:30 P. M.—Luncheon Recess

2:00 P. M.—Scientific Assembly reconvenes

5:00 P. M.—Adjournment

7:00 P. M.—President's cocktail party

8:00 P. M.—Banquet

10:00 P. M.—Dancing

(Make the May number of *The Journal* the handbook of the annual meeting with reports, recommendations, resolutions, agenda of the House and program of scientific meetings, biographical sketches of speakers, pictures, etc.—with the printed program—simpler than now.)

SUGGESTED REFERENCE COMMITTEES

1. Committee on Constitution and By-Laws.
2. Committee on Legislation, Public Policy and Public Relations.
3. Committee on Public Health and Medical Practice.
4. Committee on General Management of the Association.
5. Committee on Medical Economics, Fees and Care of Indigent.
6. The Council, sitting as the Finance Committee, to be the reference committee on appropriations, donations, changes in dues and other financial matters, not already under its control.

MINUTES OF COUNCIL MEETING

Monday P. M. May 14, 1951

The Meeting was called to order at the Ocean Forest Hotel, 2:35 p. m., by Dr. O. B. Mayer, Chairman. Those present were Dr. O. B. Mayer, Chairman, Drs. Latimer, L. Smith, H. Smith, Price, Stokes, Chapman, Cain, Tuten, Baker, Guess, Alford, Thackston,

Heyward, McCants, Sease, and Mr. Meadors.

The minutes of the previous meeting were read and adopted as read.

The application of the Palmetto Medical, Dental and Pharmaceutical Association of South Carolina, for admission to membership in the S. C. M. A. was presented. After a full and free discussion, it was moved by Dr. Price that Council appoint a Committee, composed of the President of the Association, the Chairman of the Board of Trustees of the Medical College of South Carolina, and the Senior Delegate of the State Association to the American Medical Association. This Committee to arrange a meeting with a similar Committee of three from the Palmetto Medical, Dental, and Pharmaceutical Association, for a full discussion and to report the results back to Council at the next annual meeting. This resolution to be presented to the House of Delegates for consideration.

The status of Dr. C. S. Breedin of Anderson was discussed, since he still wishes admission to the Anderson County Medical Society. This was received as information.

A letter from Dr. Stanley H. Hill, Chairman of the Planning Committee of the Mississippi Medical Association, in regard to the Negro question, with the Secretary's answer, was read and accepted as information.

The matter of Honorary Members was considered. Dr. J. M. Symmes, Dr. C. H. Blake, Dr. W. P. Turner, Sr., Dr. C. E. Crosley, all of Greenwood, were all made Honorary Members on recommendation of their County Medical Society. Dr. C. A. Pinner, Sr., retired, was elected to Honorary Fellowship.

The revision of the Constitution, with the Amendments up to date, was discussed. It was moved by Dr. Guess that Council recommend to the House of Delegates that a special Committee be appointed to revise and print the Constitution. This was passed.

A copy of the resolutions to be presented to the House of Delegates of the A. M. A. by the Ohio State Medical Association, regarding the abolishment of Fellowships, was presented to each of our Delegates to the A. M. A. Each was also given his credential card, properly filled out.

Since N. B. Heyward, Secretary, had been personally publicized in the financial statement of the Association, an itemized statement showing the disposition of each dollar spent, was presented to each member of Council, for information.

It was decided to present to the House of Delegates, the matter of the permanency of the Historical Committee, Dr. J. I. Waring, Chairman.

Dr. Price's motion that the S. C. M. A. donate \$2500.00 (later amended to \$5000.00) to The National Medical Education Fund was discussed. This was referred to the House of Delegates for endorsement, since Council is responsible for all funds.

Dr. Joe Cain's resolution in protest against hospitals hiring doctors to do the work in the hospital, the hospital collecting the fees, was passed and referred to the House of Delegates for further action.

Dr. Baker's letter, complaining of the Industrial Commissions Fees, was referred to Dr. Frank Owens, Chairman of that Committee.

Dr. Guess moved that Dr. Frank Owens' Committee on Industrial Fees be continued for another year to complete its work.

The report of the Committee on the establishment of a Grievance Committee was presented by Dr. Roderick Macdonald, Chairman. This was approved by Council and Dr. Joe Cain moved that this plan be presented to the House of Delegates by Dr. Macdonald and that Dr. Macdonald be granted the right to furnish a copy to Governor Byrnes, if and when it was adopted by the House of Delegates.

Dr. Guyton reported on Civil Defense activities.

Dr. Wyman King spoke favoring the idea of a Hospital for Alcoholics with a message from the general practitioners. He asked the appointment of a committee, to be appointed by the President, to work with the general practitioners group to promote this plan.

Dr. T. G. Goldsmith spoke briefly and introduced two speakers on the Principles and Objectives of the Association of American Physicians and Surgeons, Inc. He asked the opportunity to present their program to the House of Delegates. He was allowed 30 minutes time, under new business.

Dr. John Rainey of Anderson wrote in protest over several state-wide matters and his letter was received as information.

The report of Dr. William Weston, Jr., Chairman of the Membership Committee, was read with recommendations. The letter was received as information. It was moved by Dr. Stokes that a copy of these recommendations be sent to each County Society.

Dr. Guess reported on his plan for changing the order of business for the House of Delegates. He suggested having two sessions of the House of Delegates. At the first session all reports and motions to be referred to a reference committee. This Committee to consider and have hearings on all referred matter and to make recommendations to the second session of the House of Delegates, for action. Dr. Guess also presented Blue Shield matters and recommended certain members for the Board of Directors and for the establishment of an advisory committee for the fee schedule of the Blue Shield. Council nominated Drs. Stokes, Baker, Goldsmith, Waddy Thompson, Jr., and Mr. Gilhooly.

Dr. Stokes, Treasurer, made his report. This was received as information. Dr. Stokes moved that this Association adopt the rule of the A. M. A. as to the arrears in dues. This was passed.

The report of Dr. Price, Editor of The Journal, was received as information.

It was decided after considerable discussion, to publish a directory of the membership every two years. This was on the motion of Dr. Baker, seconded by Dr. Sease.

It was moved by Dr. Stokes that the letter, with report from Mrs. Hutchinson, Chairman of the Legislation Committee of the Woman's Auxiliary, be turned over to the new Public Relations Committee of the Association, for consideration.

Mr. Meadors outlined his report to the House of Delegates. This was approved.

Council was recessed at 6:45 p.m., until 10:00 a. m. on May 15th, to meet with the officers of the Woman's Auxiliary.

Meeting of May 15th

The Meeting was called to order at 10:05 a. m., May 15th, by Dr. Mayer, Chairman, with a quorum present.

A report was heard from Mrs. A. F. Burnside, retiring President of the Woman's Auxiliary and also a report from Mrs. Kirby Shealy, the incoming President. Mrs. Wilson, Treasurer of the Woman's Auxiliary also reported. The ladies all gave instructive and interesting reports and were thanked by the Chairman for appearing.

A motion was made by Dr. Sease that a Committee be appointed for the release of news to the public and that it be released through Mr. Meadors, Director of Public Relations. It was moved by Dr. H. Smith that this Committee be composed of the Vice-President, the Secretary and the Editor of The Journal.

Mr. Meadors reported on the entertainment for Tuesday evening and it was moved by Dr. H. Smith that \$600.00 be allowed for this entertainment. This was passed.

President W. R. Tuten asked Council to endorse the request of the Dental Association that a school of dentistry be established in connection with the Medical School in Charleston. After considerable discussion this was approved, and it was moved by Dr. H. Smith that this recommendation be presented to the House of Delegates for approval.

The Meeting was then recessed to meet at 9:00 a. m. on May 16th.

Meeting of May 16th

The Meeting was called to order May 16th at 9:00 a. m. by Dr. Mayer.

The first order of business was the election of officers. Dr. O. B. Mayer was elected Chairman and Dr. Jeff Chapman, Vice-Chairman. Dr. Price was elected clerk of the Council.

On the motion of Dr. H. Smith, Dr. J. D. Guess was nominated as an alternate delegate to attend

the meeting of the House of Delegates of the A. M. A. in June, since Dr. Smith resigns as delegate as of July 1st, 1951. Dr. William Weston, Jr., was nominated to attend the December meeting of the House of Delegates of the A. M. A. It was moved by Dr. Guess that Dr. Weston be nominated to fill the unexpired term from July 1st, 1951 to January 1st, 1952.

Dr. Julian Price was unanimously re-elected Editor of The Journal. Mr. M. L. Meadors was re-elected Business Manager & Director of Public Relations.

It was moved by Dr. H. Smith that the Treasurer make out a check to the A. M. A. Educational Fund for \$10,000 with the specification that this money be earmarked for the Medical College of South Carolina and that it be applied to the purpose of increasing the capacity of the student body. Dr. Price moved that a telegram be sent to the A. M. A. Educational Foundation that the House of Delegates of the South Carolina Medical Association had appropriated \$10,000 to its fund, under the conditions just outlined.

The Committee was appointed to serve with the Committee from the Palmetto Medical, Dental and Pharmaceutical Association, to be composed of the President, the Chairman of the Board of Trustees of the Medical College, and the Senior Delegate to the A. M. A. The President to have the authority to appoint a substitute for any vacancy on the Committee.

It was moved that next year's Annual Meeting be held the week of May 11th, since the North Carolina

Medical Assn. meets the week of May 4th.

Mr. Meadors was instructed to protest with the Management against the increase in price for the food furnished at luncheons and banquets. The same food furnished for \$1.50 for regular luncheon guests was raised to \$3.50 for the scheduled Association luncheons.

The Meeting was then recessed until 8:45 a. m. on May 17th for the purpose of receiving estimates of the budgets of the various officers.

Meeting of May 17th

The Meeting was called to order at 8:45 a. m. by Dr. Mayer, Chairman, on May 17th, with a quorum present.

It was moved by Dr. Chapman that budget estimates be postponed until a meeting called at the discretion of the Chairman, since the Treasurer and the Editor of The Journal were not present.

It was moved by Dr. Wyatt (Dr. H. Smith) that the various officers have their budgets ready to present to the Annual Meeting each year.

It was moved that a Committee be appointed to protest the charges of the dining room, for big meetings. This Committee to be composed of the President, Business Manager, and the Secretary.

Adjournment at 9:50 a. m. to meet again at the call of the Chairman.

Respectfully submitted,
N. B. Heyward, M. D.
Secretary

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

PRESIDENTIAL INAUGURAL ADDRESS

by

John W. Cline, M. D.

President, American Medical Association

Doctor Bauer, Doctor Henderson, Mr. Speaker, Members of the American Medical Association, and Fellow Americans:

The American Medical Association was founded one hundred and four years ago—to improve medical education and elevate the standards of medical care. Throughout its history these have remained its major objectives.

Except for a few war years, the Association has held an annual session and the 100th meeting is now taking place in Atlantic City. The medical welfare of the people of our country is entrusted largely to the medical profession. Current health conditions and medical progress will be reported at this meeting—and by the way of the press, radio and other media, will be transmitted to the Nation.

It is a great privilege to address my colleagues here assembled, and to speak to the physicians throughout the country and to the American people, concerning the American Medical Association, its aims and objectives.

THE WORLD LOOKS TO AMERICA FOR LEADERSHIP. As history counts the years, the United States is a youthful country and American medicine also is young. Our country and the medical profession and the medical institutions which serve it have reached early maturity. Today, as never before, the World looks to us for guidance and leadership.

We are the most favored among Nations because the light of liberty burns brightly here. Individual freedom, opportunity and incentive are the cherished birthright of our people. Likewise, we of American medicine are most favored among doctors. We live and work in an atmosphere of individual liberty, and we have the priceless stimulus of academic and scientific freedom. We are strong because we possess the dignity of free men.

ONLY FREE MEN CAN PRESERVE OUR MEDICAL ACHIEVEMENTS. Only if we perpetuate this heritage can we continue to provide the ever improving quality of medical care which is the right of the American people.

During the past two and one-half years we have been compelled to fight to maintain this essential freedom. The critical struggle to remain a free profession was not of our asking, but was forced upon us by those who have lost faith in traditional American concepts, and by those who hold the welfare of the American people to be less important than their own political advantage.

We undertook to acquaint the people with the facts. They have recognized this hazard to the quality of their medical care and the danger to their freedom inherent in Socialized Medicine. They have spoken out clearly and emphatically against it. We are grateful for the perception and the unequivocal expression of the American people.

SERVICE TO HUMANITY IS MEDICINE'S PRIME OBJECTIVE. The "Principles of Ethics of the American Medical Association" opens with this statement: "The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration."

To every doctor of medicine, let me say that this is a time for searching self-examination and earnest rededication to the high principles of our profession. We hold in trust the medical welfare of the Nation—and to that trust we owe, not only the conscientious application of our skills, but tireless devotion.

To me, this hour marks the high point of my career. It is the beginning of a year of service to the health and medical welfare of our country and to my profession.

It is a great honor to become President of the American Medical Association, but I assume that office without false pride. The responsibility, not only to American medicine, but to the American people is great. I accept it with humility—born of its importance, but face the coming year with confidence based upon an intimate knowledge of my profession, and a steadfast belief in its ability and determination to render progressively greater service to our people.

THE THREAT OF CATASTROPHE—ON TWO FRONTS. These are troubled times. The dark clouds of war hang menacingly over us. We must be prepared for catastrophe, should it come. If it does, the responsibilities of medicine will increase many fold. The Association has been working closely with the Department of Defense and other agencies of Government in planning for such eventuality.

Simultaneously, we face the possible loss of freedom through the destruction of our constitutional guarantees of liberty and through avarice or moral disintegration in high places. As citizens, regardless of our occupations, we must recognize that the right

of self-determination—the right to be master of one's own destiny—has disappeared in many countries. It is threatened in others, including our own.

The independence of the individual, his freedom of speech and his right to follow the trade or profession of his choice are basic issues. Only those who now enjoy such advantages can preserve them.

THE AMERICAN PEOPLE WILL RESPOND. I have a deep and abiding faith in the intelligence and integrity of the American people. They will respond as they did when their medical welfare and their medical freedom were threatened.

We accepted the challenge of the would-be Socializers not only because of the threat to our own professional freedom, but on behalf of the welfare and freedom that is the right of all Americans. The members of the American Medical Association are more vigilantly alert than ever to their duties as citizens and will oppose Socialistic schemes which would jeopardize the freedom of any segment of our society.

Primarily, we are physicians and our first obligation is to protect and preserve the health and medical welfare of the American people. A number of factors influence these important aspects of life, but medical care is one of the foremost. It is, therefore, appropriate at this time, for American medicine to render a report of its stewardship.

AMERICAN MEDICINE ASSUMES WORLD LEADERSHIP. American medicine has gone steadily forward. Some of the once great medical systems of the Old World have faltered and declined under stultifying Government control while American medicine has forged into a position of World leadership.

The greatness of any Nation can be measured, in part, by the health of its people. The United States is great and has developed the foremost medical care in the World. You are all beneficiaries, but you are contributors to this system as well.

American medicine could not have attained its present position without the assistance and cooperation of our educational institutions, our scientists, our colleagues in public health, our hospitals, nurses, dentists, labor and management, and all the American people—working with initiative and independence toward the same goal. Together we have made great progress in the fight against death and disease, until today we are the healthiest large Nation in the World.

TWENTY ADDED YEARS OF LIFE. Since the turn of the century, almost twenty years have been added to the life span of the American people. The general death rate during the same period has been cut almost in half. This represents the saving of more than one million American lives every year.

Our population has doubled since 1900, but the population, sixty-five years of age and older—has quadrupled. This results from saving the lives of infants, children and young adults.

An American mother now has better than 999 chances out of 1000 to come through childbirth safely.



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RESEARCH IN THE SERVICE OF MEDICINE

SEARLE

This is the best record in our history and, on a comparable basis, the best in the World.

In the ten years between 1940 and 1950, infant mortality was cut 38 per cent. At the present rate of progress the record of the United States should be shortly, if not already, the best in the World.

A baby born today has more than 20 per cent greater chance of reaching maturity and almost 45 per cent greater chance of achieving the age of fifty than had a baby born in 1900. At the same time, he faces only about half the hazard of becoming an orphan before reaching maturity.

THE CHOICE IS ACHIEVEMENT VERSUS SOCIALISTIC EXPERIMENT. I believe the mothers of America will consider that these achievements far outweigh the empty promises of those who urge a system of Government—controlled medical care. We cannot afford to sacrifice this record upon the altar of Socialistic experiment.

A recent survey conducted by the World Medical Association among the professions of forty countries, disclosed that the United States was the country preferred for postgraduate study and specialty training.

This country has the finest medical schools, the most modern and efficient hospitals, the best trained and most competent medical profession and by far the highest standard of medical care the World has ever known.

I should like to underscore the next statement. The American people are entitled to this assurance: *No health crisis or medical emergency exists in this country.*

We are proud of the part the American Medical Association has played in this record of progress.

A.M.A. GROWS AS A GREAT PUBLIC SERVICE ORGANIZATION. As our country has grown and changed from a rural to a mixed industrial and agricultural economy, the problems of medical care have multiplied. The American Medical Association has grown and developed correspondingly during the same period.

Few Americans know of the extensive activities of the Association devoted to their welfare. Few realize the degree to which it is a great public service organization. The nine-story headquarters building in Chicago houses more than eight hundred employees, working full time on projects which are directly or indirectly in the public interest.

Early in the present century, medical education in this country was in a deplorable condition. "Diploma mills" and second and third rate schools flourished. The American Medical Association, in cooperation with others, established sound educational standards and began regular inspection of medical schools. Today, all the medical schools in this country are of high quality and are turning out splendid physicians. This is one of the main reasons why medical science

has progressed so rapidly in the United States during the past thirty years.

A MEDICAL F.B.I. PROTECTS THE PEOPLE. For the past fifty years, the Association has worked for high standards in the manufacture of drugs and appliances. The American Medical Association itself tests hundreds of drugs and appliances every year. Its seal of approval upon such products assures the profession and the laity, alike, of high quality.

The Association operates what might be described as a medical F.B.I.—which investigates and exposes quack doctors and fake remedies. Every year many worthless medicines and treatments appear upon the scene. The American Medical Association cooperates with law enforcing agencies throughout the country in securing withdrawal of such remedies and in exposing quack practitioners.

A.M.A. FUNDS FOR MEDICAL RESEARCH AND EDUCATION. On the other hand, the Association consistently encourages and assists worthwhile research. Every year the Association spends several hundred thousand dollars to aid research. It was a pioneer in health education, and spends additional hundreds of thousands of dollars annually giving factual health information to the American people through newspapers, pamphlets, radio, television and motion pictures.

The American Medical Association has promoted the development of sound Voluntary Health Insurance to ease the financial burden of serious illness. As a result of this effort—in conjunction with hospital groups, insurance companies, labor, industry and others—there has been tremendous growth of this type of coverage. Today, more than seventy-two million people have some type of Voluntary protection against the financial shock of illness.

We shall continue our efforts to expand and improve prepaid medical care, and confidently look forward to the enrollment of the vast majority of our people in Voluntary plans within the next few years.

PRIVATE ENTERPRISE IS SOLVING THE ECONOMIC PROBLEM OF ILLNESS. I can make this flat declaration: The problem of insurance against the economic hazards of illness is well on its way to orderly solution within the existing framework of private enterprise.

One of the most important tasks of the Association is to keep its members informed of the latest developments in medical science. To this end, it holds two large meetings each year. The physicians learn by hearing papers presented by leaders of the profession, viewing films and television portrayals of surgical and diagnostic procedures and by wandering through miles of medical exhibits. One physician recently described such a meeting as "a complete postgraduate education under one roof."

To inform the physician who cannot attend these meetings and to eliminate delay in presenting new discoveries made between meetings, the Association



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regularly publishes ten scientific journals and several books. The weekly Journal of the American Medical Association is the most widely read and most highly esteemed of all medical periodicals.

What do these activities mean to you, the public? These services of the American Medical Association keep your doctor up to date through his years of practice so that he may render the best medical care to you and to your family.

A.M.A. WORKS IN ALL FIELDS OF HEALTH. The Association is concerned with the health problems of all segments of society. It studies industrial hazards, cooperates with labor and management to eliminate them, and holds an annual conference on industrial health.

It does similar work in the field of rural health, where it works with those organizations interested in rural problems. It has helped design plans for placing doctors in rural areas where they were needed.

The Association is currently studying means of improving services for those in the lower income brackets. It is one of the co-sponsors of the Commission on Chronic Illness which studies diseases of long duration, particularly those of the aged.

One Council is devoted entirely to the problems of Civil Defense and the Armed Forces. Another Bureau compiles and analyzes medical statistics. It recently completed the only National study of blood banks which has ever been made. The Nation is now in a position to know the requirements for blood and the sources of supply.

AVAILABILITY OF GOOD MEDICAL CARE CONSTANTLY INCREASING. In medical problems that are best solved at the local level, the Association serves in a coordinating and advisory capacity to State and County Societies. It urges programs such as that to make medical care available at any hour by the establishment of night and emergency call systems in all communities.

Another project is the Nationwide development of grievance committees—to hear and act upon complaints which patients may have concerning any aspect of medical service. Thirty-six States now have such committees.

There are many other public service projects of the American Medical Association, but this brief discussion perhaps will demonstrate the substantial contribution which organized medicine has made and is making to America's health.

Problems still exist and no one is more aware of them than the medical profession. Certain rural areas and some Government services need more physicians, but there is no real shortage of physicians.

The United States has more doctors than any country and except for Israel, where an abnormal situation exists, a higher ratio to the population than any Nation.

COOPERATION SOLVING PROBLEM OF DOCTOR DISTRIBUTION. Medical care is less available

in certain areas than in others. However, the American Medical Association and the State and County Societies are assisting such communities to obtain more doctors; they endeavor to bring together the doctors seeking places to practice and the localities in need of physicians.

The problem is one of distribution rather than shortage. Significant improvement has taken place and is continuing, as a result of the cooperation of the branches of medical organization with the local communities in need.

Looking toward the future, the American Medical Association favors training more physicians. Our medical schools have expanded their enrollments. At this time, there are more students preparing for careers in medicine than at any time in our history, and by 1960 we will be producing at least 30 per cent more physicians than we did in 1950. This tremendous growth will be accomplished without sacrifice in the quality of education. To fail to maintain our present high standards would be ruinous to the future of medical care.

A.M.A. STIMULATES PRIVATE SUPPORT FOR MEDICAL SCHOOLS. Some of our medical schools, however, are in financial distress. This is a matter of deep concern to the American Medical Association. In appreciation of this situation, the Association has donated a half million dollars in an effort to stimulate realistic private support for medical education. Other Societies have contributed lesser amounts. On May 16th last, the Foundation created by the Association was merged with the National Fund for Medical Education headed by Mr. Herbert Hoover. I urge every physician to contribute promptly and generously.

In addition, we advocate one-time Federal grants for necessary remodeling and construction. The Association believes that medical education can be financed adequately by these means and without danger of Federal control.

We recognize the great service to medical advancement rendered by our full-time basic science and clinical teachers, and seek to improve their opportunities.

AMERICAN MEDICINE DEDICATED TO HIGH PURPOSES. In a changing World nothing is static and new problems will arise. Physicians do not issue careless statements concerning the health of an individual or a Nation. I make no irresponsible, utopian promises, but I assure you that we are attacking the problems confronting us with the same determination that has characterized our battle against disease.

I am proud to serve as President of the American Medical Association. It is a truly American institution, democratic in organization and dedicated to high purposes. It has one hundred forty-odd thousand members—the vast majority of American physicians engaged in the care of the sick.

The greatness of American medicine is inseparable from the over-all greatness of America. It has sprung

new DURABILITY new CLEANLINESS
new COMPACTNESS new BEAUTY



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This compact case is made of reinforced material to withstand far more stress and wear than any case will receive in normal use. It has amazing resistance to scratches and abrasion, and retains its like-new appearance for years.

The soft rubber lining protects the instrument against shock damage. Like the entire case, it can be washed with soap and water and sterilized by wiping with alcohol, an impossibility with old style plush-lined cases.

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from the same freedom which has made possible the attainment of high standards in all fields of endeavor.

PHYSICIANS, AS CITIZENS, PLEDGE FIGHT FOR AMERICAN FREEDOMS. Democracy and democratic institutions are on trial. It is an historical fact that men must control themselves and their destinies or be controlled by others. The philosophy of statism is foreign to the American concept of life.

American medicine eagerly assumes its responsibility to provide medical care of ever higher standard for the American people and to bring that care progressively within easier reach of those who require it. At the same time, the physicians of this country pledge themselves to dynamic activity as citizens to preserve the freedom which is requisite to the fulfillment of their medical obligations to the American people.

EMERGENCY MEDICAL CALLS*

One of the responsibilities of the county medical society today is providing emergency service to the residents of any community. The inability of any individual to secure a physician in emergency cases, has been the basis for one of the most serious accusations against the profession as a whole.

Night calls, emergency calls, have been thoroughly discussed in medical journals, county society bulletins, and in THE LAY PRESS. The Council on Medical Service of the American Medical Association conducted a survey during the summer of 1948 and found that only about 60 county medical societies had developed any formal plan for handling emergency and night calls. The increasing pressure on this phase of medicine has resulted in bringing this total to 100 or 120.

The problem varies according to the population of any community. Plans adaptable in a city of 100,000 would not be necessary in a town of 5,000. However, the plan which would be successful in a city of 100,000, might not be the answer in a metropolitan area.

Illinois presents a complicated picture of metropolitan problems and rural situations to make it necessary that the plan adopted fit the community which it serves. For this reason, the solution rests upon the county medical society.

The Council on Medical Service of the American Medical Association has developed a pamphlet which outlines 16 plans representing a cross-section of the various approaches being used throughout the country by medical societies.

James R. McVay, M.D., Chairman of the Council, writes: "Every county or city has real emergency cases, and one of the weak spots in many medical care programs is the inability to put physicians in

immediate contact with such cases. The first requisite to successful handling of emergencies is an understanding and cooperative medical profession. Some physician has to make the emergency night call; every physician should do his part so that the burden does not fall on the FEW. The second requisite is a well defined plan for handling such calls—a plan which is understood and accepted by the public and the physicians. It is hoped that this pamphlet will be of assistance to many societies in devising a workable plan."

Write to the Council on Medical Service
American Medical Association
535 North Dearborn Street
Chicago 10, Illinois

and request that they send you: "Planning for Emergency Medical Calls"—A Resumé of the plans of 16 county medical societies.

If your society has not been active in this phase of medical care planning, now is the time for you to add this to your list of important services to be provided for the residents of your community.

IT'S GOOD PUBLIC RELATIONS.

MODERATE RISE IN MORTALITY

In the first quarter of 1951 the death rate among the Industrial policyholders of the Metropolitan Life Insurance Company was 7.1 per 1,000, or 3.3 percent above that for the like part of last year. Two factors account for the major part of this increase: the widespread outbreak of respiratory disease and, to a lesser extent, the loss of life due to the Korean War.

The war losses show up clearly in the record for white males at the main military ages. Thus, in the age group 15-19 the general mortality rate was 68 percent higher than the rate a year ago; at ages 20-24 the rise was 56 percent. Relatively small increases in the death rate were also recorded among men at ages 45 and over; at some of the younger ages, however, there were moderate declines. The net result of these changes has been to bring the death rate for white males 5 percent above that for the first quarter of 1950. Among white females the death rate has decreased at every age group except the preschool years.

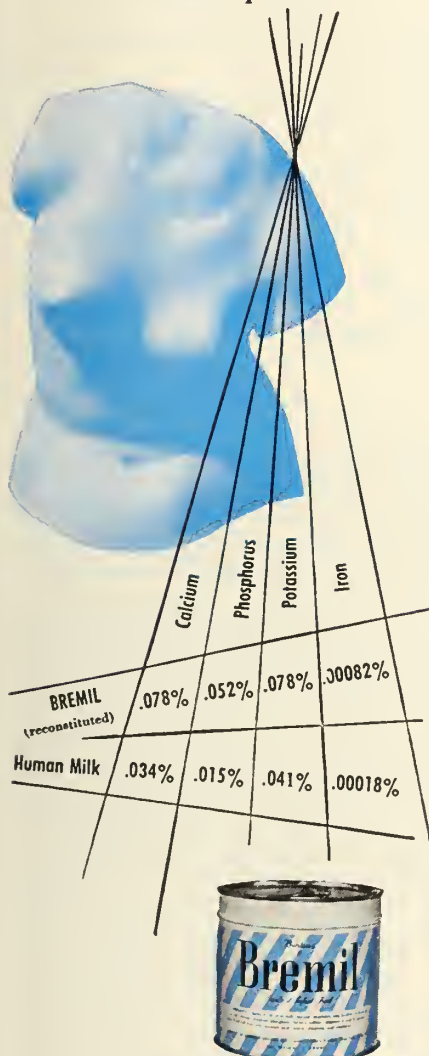
The outbreak of respiratory disease is reflected in the increased death rate from pneumonia and influenza. For the January-March period, the pneumonia mortality among the Industrial policyholders was 22.0 per 100,000, compared with 19.2 a year ago; for influenza the corresponding figures are 4.6 and 2.7 per 100,000. There were fears at the beginning of the year that the epidemic, which affected large areas of the world, might prove to be catastrophic in character. These fears are now allayed by the subsidence of the outbreak.

The major diseases of middle and later life likewise registered a rise in mortality so far this year as com-

*Reprinted from the Illinois Medical Journal, May 1951.

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1. Gardner, L. I.; MacLachlan, E. A.; Pick, W.; Terry, M. L., and Butler, A. M.: *Pediatrics* 5:228, 1950.

2. Nesbit, H. T.: *Texas State J. M.* 38:551, 1943.

3. May, C. D., et al.: *Bull. Univ. Minnesota Hospitals* 21:208, 1950.

4. Recommended Daily Dietary Allowances, Rev. 1948, Food & Nutrition Board, National Research Council.

pared with last. The death rate from the malignant neoplasms and from the cardiovascular-renal diseases increased a little more than 2 percent; the rise for diabetes was considerably greater. Part of the increased mortality from the chronic conditions probably resulted from the high prevalence of the respiratory diseases.

Tuberculosis, however, continues its marked downward trend. The death rate from this cause is one fifth below the previous minimum recorded in the first quarter of 1950. Among these policyholders the rate is now down to 18.1 per 100,000—a remarkably low level. Even more spectacular is the experience for the principal communicable diseases of childhood; the death rate from measles, scarlet fever, whooping

cough and diphtheria together is now only 0.5 per 100,000. New low rates are also in evidence for the complications of pregnancy and childbirth, for appendicitis and for gastritis. Acute poliomyelitis shows the same rate as in the first quarter of last year—0.3 per 100,000.

Fatal accidents are somewhat higher this year than in 1950, although the death rate from motor vehicle mishaps recorded a slight decline. The increase reflects in part the rise in occupational fatalities, following the marked upswing in the number of persons employed in heavy industry and in the defense effort generally. Suicide and homicide both show a small decline.

HISTORICAL SIDELIGHTS

WILLIAM HENRY JOHNSON, M. D.

AUSTIN T. MOORE, M. D.

Columbia, S. C.

The subject of this paper is perhaps the outstanding unforgettable character of my life. He was a man whom at first I feared and later learned to love.

Doctor William Henry Johnson was in charge of the Department of Orthopedic Surgery during my student days at the Medical College of the State of South Carolina in Charleston and at the time of my graduation in 1924. It was during that time that I, along with other students, feared him. Later I came to recognize his strength of body, mind and character, and I learned to love him when I was honored by an appointment to the faculty of the Medical College as lecturer in orthopedic surgery. This took place in 1929 and after I had returned to Columbia to practice orthopedic surgery following the completion of my post graduate work in Philadelphia.

It was my privilege to make weekly trips to Charleston for the next few years and to come to know Doctor Johnson more or less intimately. I was allowed to organize an out-patient orthopedic clinic, to lecture to the junior and senior classes, to have ward and private patients and to conduct an orthopedic clinic for the students. My days were full ones. It was necessary for me to leave Columbia at 5:00 o'clock in the morning. Usually it was well past midnight when I returned. I remember on one visit there were ten operative cases awaiting my attention.

As I look back on it now, how Doctor Johnson could have been so gracious, so cooperative and so kind to me, an inexperienced and aggressive youngster, is amazing. Particularly is this true when it must be remembered, as will be brought out later, that he was not an operative surgeon, but he was kind and good to me and tolerant of me. I loved him and respected



him and our relations were most cordial. In 1931 it was necessary for me to discontinue my work in Charleston and I was succeeded by Doctor F. A. Hoshall, the present head of the orthopedic department. Doctor Johnson's tolerance of me, his warm and guiding friendship and his complete co-operativeness in helping me during the days I was teaching at the Medical College is, to my mind, one of the finest examples of magnanimity.

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Doctor Johnson died in 1934. As the years passed, I began to think more and more of writing a memorial to his life to present to our Medical Club here in Columbia. When my turn came to read a paper in 1943, I had determined to make this my subject. I visited with Mrs. Johnson who was very interested in the project. She talked with me freely about many phases of her husband's life and she gave me a great deal of historical data about him and the family. We reviewed his scrapbook and a few manuscripts. She gave me a few personal papers, one or two newspaper clippings and a copy of the memorial resolution that had been presented to the Medical Society of South Carolina in Charleston. Other than this there was no testimonial evidence to which I could refer. It was surprising that there was so little of record concerning the life of this interesting man.

During my association with Doctor Johnson, he had revealed himself to me in many ways, but I hesitated to use this alone as my source for material. I realized that only by interviewing his associates and those who knew him best could a reasonably full and accurate accounting be obtained. Such an undertaking would be most difficult for anyone not living in Charleston, yet the idea was most fascinating because one only needed to mention the name of Doctor Johnson to anyone who knew him to immediately provoke an enthusiastic recitation or anecdote concerning him or some unusual phase of his life. For various reasons, my decision to write a paper at that time was postponed.

On November 7, 1946, Doctor John A. Siegling of Charleston presented a delightfully written memoir of the life of Doctor Johnson to the Medical History Club of that city. This splendid paper was published in the Journal of the South Carolina Medical Association in April 1947. With Doctor Siegling's permission, his paper will be drawn on freely in the preparation of my presentation.

William Henry Johnson, scion of distinguished lineage, was born in Charleston, South Carolina, on March 30, 1879. His parents were William Johnson and Mary Holmes Mellichamp Johnson. His boyhood days were spent in Charleston where he attended private schools. In 1888, at the age of eighteen, he entered the University of South Carolina and completed a three year course in science in 1891. The following two years were spent at The Medical School of the University of Virginia where he graduated in 1893. Evidently the medical curriculum of that day consisted of a course of only two years. Due to his inheritance, Doctor Johnson found himself at the time of his graduation a man of substance and independent means.

There were no prolonged periods of prescribed post graduate training in those days and the opportunity for study in this country was somewhat limited. Europe was the mecca of medical knowledge. Having financial security and the means at his disposal to satisfy his burning thirst for further knowledge, it is

interesting to learn that Doctor Johnson embarked on a course that consumed the following seven years of his life pursuing post graduate studies in America and abroad, in the profession he had elected to follow.

No doubt he realized the brevity of his formal medical education in 1893 and he was resolved to be fully prepared for his private practice which did not begin until the year 1900. This resolve was the source of great gratification and pride to his father-in-law, the late Bishop Ellison Capers, who used to take pleasure in stating that he knew of no other person who had a roll of diplomas as large as his leg.

During the seven years following his graduation, Doctor Johnson spent considerable time in New York City, studying a variety of subjects. He studied the treatment of fractures with Royall Whitman, pediatrics with Seibert and Holt, and gynecology and obstetrics at the Lying-in-Hospital. He habituated the Carnegie Laboratory, the Mothers and Babies Hospital and the House of Relief connected with the New York Hospital. Furthermore, he followed a special course of study at the Bellevue Hospital Medical College.

Leaving New York he spent two years visiting famous medical clinics in Europe, principally studying dermatology in the Clinics of Berlin and then he sojourned for about a year in Russia, where he became deeply interested in the study of leprosy. The latter effort cannot be written off as pure academic knowledge, for it is recorded that he did actually encounter and treat a single case of leprosy later after he had become engaged in private practice in Charleston.

In 1898 Doctor Johnson had the great good fortune to win the hand of the lovely Miss Lottie Capers who was to be so patient, loyal and devoted to him the remainder of his life. Following their marriage in Charleston, they set off on a four month wedding trip to Europe. Mrs. Johnson tells a delightful story of how her husband who had already traveled so much abroad was anxious to impress her with his ability as a linguist in each of the countries that they visited. Privately, she was convinced that her gesticulations and pantomime were largely responsible for the success of his efforts.

To this union there were four children; two boys and two girls, who were later to distinguish themselves in their separate walks of life and before Doctor Johnson's death he was to know the pleasure of having eleven fine grandchildren.

It was in 1900 that Doctor Johnson finally ceased his travels and pilgrimages to various places and he finally settled down to the practice of medicine in Charleston. Soon thereafter another change was necessary as Mrs. Johnson became seriously ill and for the benefit of invigorating mountain air, they removed to Sewanee, Tennessee. There, Doctor Johnson not content with being idle, joined the faculty of the Univer-

sity of the South and taught anatomy and pediatrics and dermatology.

Soon Mrs. Johnson's health was restored and they returned to Charleston in 1901 where Doctor Johnson resumed his practice. His residence was established at 107 Wentworth Street and there he also had his office and laboratory that was to become a unique institution of its own.

On resuming his private practice he also took on the responsibilities of City Physician and attending patients in jail. In recognition of his special training he was requested to teach gynecology at the Polyclinic and roentgenology at the Medical College.

He entered into his work with such assiduity and enthusiasm that soon he was literally buried in his own efforts and was more wedded to his work than his family. His family increased by the advent of four children; two sons and two daughters. These grew up in the house, office and laboratory on Wentworth Street, but Mrs. Johnson told me that Doctor Johnson became too busy to be spoken to and that he did not know his own family.

He became deeply interested in electricity and was the first man in the State to own an x-ray machine. He had various static machines and mechanical devices that he used for treatments. As developments in these machines evolved, his became outmoded and he acquired new ones so that soon he had a vast array of all types of physical therapeutic equipment.

Although it is true that Doctor Johnson was so studious and so deeply engrossed in his work that he allowed little time for family life, certainly it is equally true that he was intensely devoted to each member of his family and, in addition, he was a very devout Christian. He was a member of the Grace Episcopal Church located just across the street from his residence and served on its Vestry for twenty-five years. In times of stress or prior to particularly serious operations he would frequently go over to the church to pray. He was interested in the church history and, at the request of Bishop Thomas, he made notes to conclude the history of Dalcho. Apparently this was never completed. He also did some research work for Bishop Guerry on the history of communion plate in lower South Carolina.

As his office became cluttered with machines, microscopes and paraphernalia of all sorts, his family was called on more and more for assistance. Mrs. Johnson told me that on so many occasions she assumed the role of office nurse. Often some member of the family was used to demonstrate the harmlessness of the whirring sparks from the static machines before a patient could be induced to subject himself to treatment or examination. His young son, Reid, was frequently used for this purpose. Once when answering an inquiry about the static machines Reid stated, "That's what my father uses to kill his patients with." I, myself, remember my first visit to Doctor Johnson's office in

my student days. How awesome it was to see the display and hear the crackle of great electrical sparks to the tune of the whirl of the motor as a giant static machine was revolved by hand. One of these machines is still preserved in the Charleston museum.

Doctor Johnson's interests were catholic. In addition to private practice he taught successively anatomy, pediatrics, obstetrics, gynecology, dermatology, radiology and, finally, orthopedic surgery. Such a wide sphere of activity is amazing but it must be remembered that Doctor Johnson's mind was such that once his interest was aroused there was no let up in the zeal of his pursuit of the subject until it was mastered to his satisfaction. He perceived an answer to a problem and proceeded to solve it.

While working as city physician, his sense of obligation was such that he felt that it was his duty to make sure of answering promptly every call. For this reason he rigged over the head of his bed a very large bell that was connected by wires to the office door bell. So successful was this apparatus that it not only succeeded in arousing the doctor but everyone else in the household as well.

If he needed a splint he made one. Sometimes it was the leg of a chair, the curve of which suited his fancy. That the chair was an heirloom made no difference. On one occasion he bored a large hole through a beautiful mahogany table in order to pass through some electric wires and mount a lathe so as to facilitate his work.

Mrs. Johnson told me that on another occasion he gave to a needy colored patient some of her beautiful hand embroidered sheets. He gave a \$100.00 magnifying glass to a wealthy patient (Mrs. Frost on the Battery) to relieve some skin affection of her face and then advised her to go to see a Doctor Robinson in New York. He used a bag made of fine hand tooled leather to make a splint to treat the son of Doctor Van de Erve when he broke his leg. In addition to his professional service, he frequently gave money to indigent patients. There were many examples of this type of unselfishness and consideration of others.

Another problem of Doctor Johnson's was solved in a very practical way. There was a colored physician, William Henry Johnson from the north, living in Charleston and listed identically in the telephone directory. Naturally, at times there was considerable confusion and annoyance in the telephone calls. Doctor Johnson complained to the telephone company and requested that the word "colored" be placed after the other doctor's name. The company refused this request on the ground that they could not add anything after anyone's name unless at the specific request of that particular party. Doctor Johnson promptly requested that the word "white" be added to his name and so he was listed for the remainder of his life.

He was not a business man. Mrs. Johnson said that he needed a business manager as he kept no records

and made no charges. He inherited a fortune but he spent a fortune in incubators, induction machines and impractical inventions.

For hobbies, he interested himself in photography, the history of Charleston and the Low Country, genealogy and in art. He compiled a large scrapbook on Charleston that included illustrations from Huger Smith's "Dwelling Houses of Charleston." Many other illustrations from other source books were added and, in addition, there were many photographs of his own. These were carefully arranged in symmetrical form, clippings from the texts were included and concise annotations to the whole were painstakingly made in his own hand. He also prepared a manuscript on "A Partial Genealogy of the Family of William Johnson."

His skill as an artist is exemplified in a number of different ways. There still exist several pencil drawings that he made of various members of his family. These are remarkable and almost photographic in character. Doctor James Fouche and others of his earlier students have told me of the anatomical drawings that he made to illustrate his lectures. These were outstanding and correct in minute detail.

With all of his versatility and breadth of experience and knowledge one may wonder how it was that Doctor Johnson finally decided to settle down to the practice and teaching of orthopedic surgery. Perhaps it was his love of things of a mechanical nature, perhaps it was his early training under Whitman in New York. At any event when the Medical College was taken over by the State of South Carolina in 1913 Doctor Robert Wilson, the Dean, approached him and told him of the need of a department of orthopedics in the curriculum. Doctor Johnson replied that he would brush up on the subject a little and that he would be that department. Aside from a nineteen months period of military service he remained head of the department until his death.

Doctor Johnson answered the call of duty and volunteered for active service during the first World War. He enlisted January 4, 1918 in Charleston and was given the rank of Captain in the Medical Corps. After a course of training at several stations in this country, including Camp Jackson at Columbia, he sailed from New York City on the Leviathan on July 8, 1918. The following twelve months were spent on the orthopedic service of several large base hospitals in France. At one time at Base Hospital No. 68 at Mars su Allieux, he had under his treatment 774 sick and wounded without the benefit of assistance from other doctors, nurses or orderlies. This was a monumental task. He devised means of making as many of his fracture cases as possible ambulatory and in this way, many of the patients assisted in the care of others. Evidently his work was done well and with accustomed thoroughness, as I have in my possession copies of letters from Colonel L. O. Tarlton and C. B. Francisco, praising him for his skill and recommending his promotion to Major. It is strange that this promotion was never made. Doctor Johnson re-

turned to this country on July 5, 1919 and was honorably discharged at Camp Dix, New Jersey on August 5, 1919. Soon thereafter he resumed his practice and teaching in Charleston.

Doctor Johnson was a large, heavy set, deep chested, powerful man. He was peculiar and gruff at times, but very courteous in his manners. His face was a peculiar combination of sternness and, at times, fearfulness, but he had a merry twinkle in his eye, his expression could be soft and he could laugh with a hearty guffaw. Children loved him and, he, them. He prided himself very much on his strength and for exercise he used to throw a heavy anvil around his back yard. My recollection is that he did not use tobacco or indulge in alcoholic beverages.

I recall very clearly his pride in making splints for his patients. He did all of this with his own hands and would trust no one to do it for him. In addition to his work shop at home he kept under his own lock and key a small splint room at the Roper Hospital. No one could go into this room. He delighted in bending cold steel into the necessary shape for an individual case and he told me of some noted authority who had complimented him on being the only man in America who could bend metal in that way without heating.

At college his nickname was "Jumbo" and his feats of physical prowess were many. There is a famous "goat story" concerning which there are numerous versions. One is that while at the University of Virginia he bet a classmate that he could kick a goat in the rear and break its neck. Just as he was preparing to execute the pedal punch, the goat turned, rammed him on the opposite shin and broke his leg. The story goes on to say that Doctor Johnson, still resolute and determined in his purpose further enticed the goat until it charged again. Using his good leg, he hopped behind a tree just in time. The goat rammed the tree, breaking its neck and "Jumbo" collected his bet.

My memory may be distorted concerning this story, but I am sure that I can recall Doctor Johnson's version as he told it to me on request. I was particularly anxious to hear it directly from him. My recollection is that this was an especially large and ferocious animal that in considerable measure had terrorized the neighborhood with various deeds of its strength and ferocity. Doctor Johnson wagered that he could kill the goat with his bare hands, which he did. He told me that the trick was in very precise timing. It was a simple matter to stand still as the goat charged and just as the goat lowered its head for ramming, quickly kick him on the nose with one foot, grasp his horns at the same moment, jerk the head forward, flip the goat over and break its neck. It was my understanding that he had been proclaimed a hero for riding the community of such an unpleasant and dangerous animal.

Another story that he told me gives still further testimony to his prodigious strength. I do not recall the details clearly, but it seems that he was somewhere in an old or unfinished building aiding in the



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capture of a criminal or some fugitive from justice. They knew the man was hiding somewhere in the building. Doctor Johnson looked up and saw the man's foot showing through a crack or hole in the ceiling. He jumped up, grasped the man's foot in one hand, supporting his own weight, and held on until others could go up in the loft and capture the criminal.

Another delightful story I recall his telling was of his first automobile, which I understand was the first in the state owned by a doctor. It was one of those early converted buggy affairs with high wheels, chain drive, a small motor under the seat and no top. The rear seat was immediately behind the front seat and faced backward. He would tell how horses would plunge and shy with fright as he approached and he would laugh heartily as he told how guests for their first ride would squeal with excitement and hang on as he turned corners at the reckless speed of perhaps five to ten miles per hour.

An interesting habit of Doctor Johnson's which had its inception with his first car was that he always made sure to write down the license numbers of the cars in front and behind when he parked his own automobile. In this way he would have the number of the car in case his might be damaged.

As has been stated previously, Doctor Johnson was not an operating orthopedic surgeon. By that is meant that he did not operate as much as does the modern orthopedist or as much as some are wont to do. He believed in and he taught conservatism. He decried open operations and was of the opinion that anyone who did not possess sufficient skill to be an orthopedist. In fact, Doctor Johnson belonged to that early school of strap and buckle or harness making orthopedists whose pioneering efforts did so much to develop the specialty but whose methods in many instances have been succeeded by modern means. In time, our prized modalities of today will be relegated into tomorrow's yesterday.

The basic principles he taught were good and his knowledge of anatomy in its relation to bio-mechanics was amazing. He could describe all of the stresses and strains of ligaments and muscles affecting a fracture and influencing its reduction. I remember how he calculated the strength of the patellar tendon when subjected to the strain of supporting the body weight of an individual who sits on a rail fence and leans backward. The long arm of the lever makes the force tremendous if the rail is just behind the knees. He taught the proper way in which to reduce a fracture or dislocation is to reverse the manner in which the injury occurred.

All of his students recall how he required them to make all types of splints with hairpins and small wires. He taught the importance of a careful history and physical examination in making a diagnosis. Unfortunately today the physical examination in so many cases of bone injuries is omitted in favor of the x-rays.

In teaching his classes he referred to special charts that he had prepared. These hung suspended from a wire that extended all around the classroom. The charts were great scrolls that he had prepared himself and many were illustrated. Of particular interest were the hieroglyphic that he used to abbreviate certain words. For example, an oblique line meant "usually" and a figure of eight turned horizontally meant "sometimes." All of these charts have evidently been lost or discarded. He lectured from the charts and, furthermore, he expected students to remember some of them verbatim. At the time of his examinations he frequently asked a question with a numeral at the end of it. This meant that he expected the answer to contain that exact number of words.

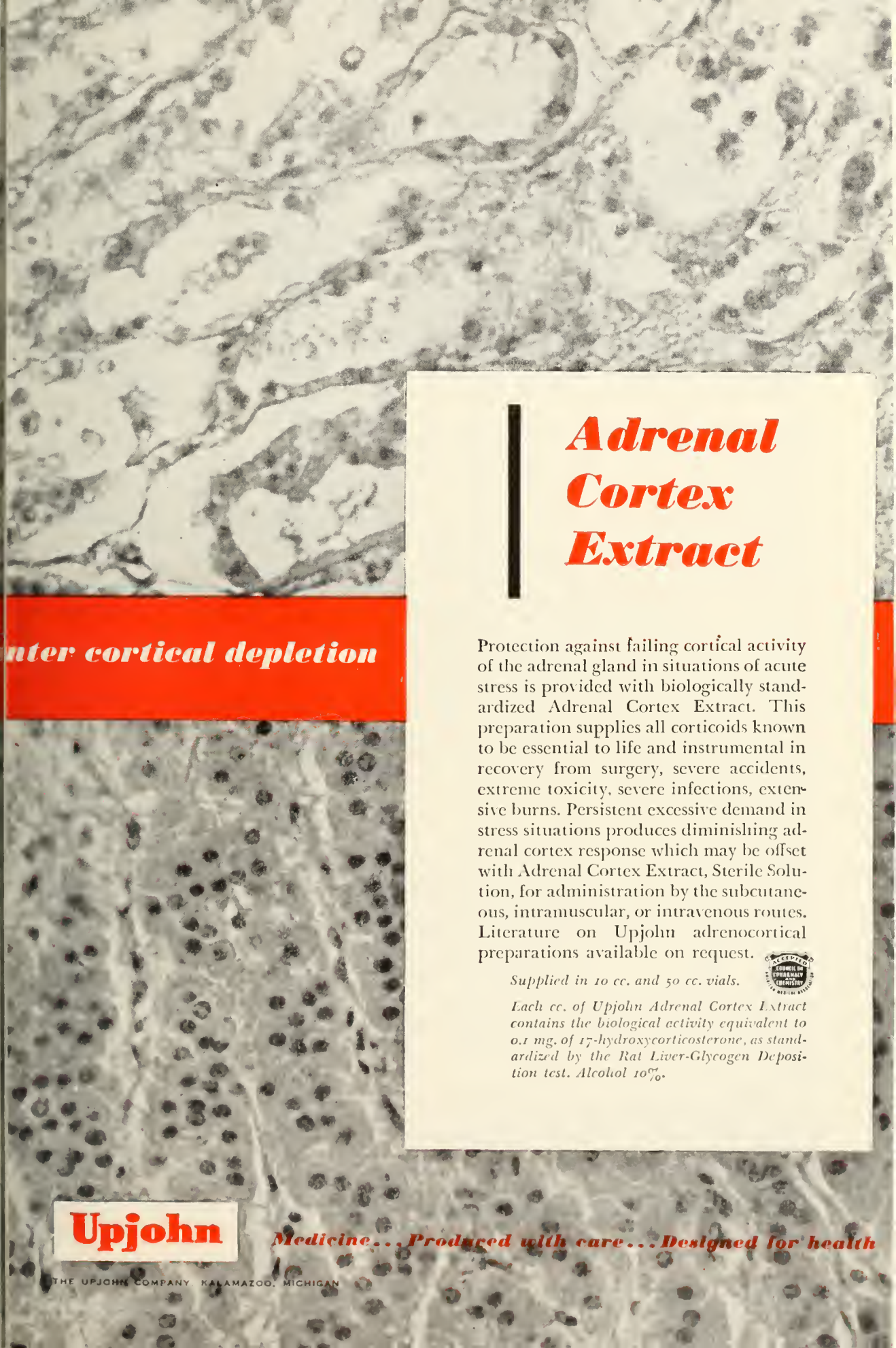
He confided to me that it was his ambition to record all of his lectures on one great scroll, such as a large roll of wrapping paper. He hoped to have this mounted under a trap door concealed in the floor of the rostrum of the lecture room. The entire mechanism could be controlled by electric motors so that at the touch of a button the floor could be made to raise up and present the scroll that in turn could be made to roll forward or backward by electric control. He believed that the convenience of this method would be very desirable and his work and his charts would be preserved indefinitely.

He spent hours making many bizarre splints and braces. Splints were frequently made of metal from the hood of an old automobile. The modern commercial aluminum splint was not known in those days nor were many other pieces of time saving equipment. He used kitchen aluminum ware from Mrs. Johnson's kitchen for many of his splints. He would go to the blacksmith shop for a lot of his work. It was here that he would build windlasses in the ends of his Thomas splints that he used so frequently for traction.

In fairness to the record it should be stated that many of his methods were unnecessarily complicated and often he seemed to prefer the complicated method to some simpler means.

I recall his method of reducing a fractured clavicle by putting the patient's outstretched arms in Thomas splints whose rings abutted each other under one shoulder. The arms were fastened to windlasses in the ends of the splints and as the patient lay supine in bed over a large pillow between his shoulders, the windlasses were tightened gradually. There is no question about reducing the clavicle. The only question is how long the patient could remain in this position and what to do when the splints were removed.

His demonstration of a method of reducing a traumatic dislocation of the hip was equally impressive and dramatic. The patient was placed face downward on a bed with the affected limb hanging over one side, the knee and hip flexed to a right angle and the foot resting on a chair. A heavy weight was suspended



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from the leg just below the knee and the patient was left in this position. As muscle relaxation took place within twenty to thirty minutes the hip snapped back into place. This is a prescribed method of treatment described in text books and is something that should be remembered in cases where anesthesia is contraindicated. Without disrespect, it follows the same principle of treatment as laid down by Hippocrates who recommended that the patient with a dislocated hip be placed astride a bullock that had fasted for five days on salt and hay. The feet of the patient were bound together under the animal's abdomen and he was then led to water. As the abdomen swelled "the wandering bone was brought back into its socket."

Doctor Johnson developed a most ingenious fracture bed that in many respects was similar to the modern orthopedic table. He made a beautiful and expensive brass model. It was so complicated that no one other than himself knew how to operate it, but it is a great pity that this, along with many other pieces of his equipment, has not been preserved.

It was a revelation and indeed uncanny at times to see some of the things that Doctor Johnson did. His strength and unusual understanding of mechanical principles no doubt was responsible for the good results in most cases, but at times he literally seemed to hypnotize patients and make them do as he willed. Doctor Siegling records the case of a negress with a fractured jaw that no one was able to reduce. Doctor Johnson came into the room and in a moment effected the reduction. When asked how it was done he replied that he had inspired such complete confidence that relaxation made the reduction easy. I recall a similar incident relating to a fracture of the upper end of the humerus. He used an ice pick with very little local anesthesia, yet relaxation was complete and he made a perfect reduction.

To avoid surgery, he frequently resorted to the use of an ice pick inserted for leverage between the fragments of a fracture. At times he used a fork when wider leverage was necessary. This was probably an original method with him, as I know of no previous text in which it was recommended. He used this method frequently in supracondylar fractures and to manipulate fractures of the radius and ulna. He dreaded elbow fractures and the possible development of stiff joints and "gun-stock" deformities. I know of no reason for this, for I think his results were good but he may have been a little impatient and manipulated the joints for motion after healing had taken place.

To illustrate the change that has been wrought in orthopedics since I was a student, I remember Doctor Johnson teaching that one should never operate on the knee joint unless absolutely necessary. He emphasized that the knee is the largest joint in the body and, infection, therefore, might be fatal. With modern asepsis and antibiotics, knees are operated on now without hesitancy. He taught that when doing

amputations one should be very careful to wash away the sawdust as this could cause infection. Now sawdust is collected and the small bone particles are recognized as being very advantageous in bone grafting surgery. I do not recall ever having seen Doctor Johnson do a bone plating, bone grafting or other commonly performed elective bone operation as is done today. Bone surgery in Charleston in my student days was rather infrequent and wound infections were not uncommon. Doctor William Aimar did a fair amount of bone surgery and was known as "Bloody Bill." Doctor Johnson boasted that he never had a patient to die on the orthopedic service. When such an eventuality seemed likely he transferred the patient to general surgery.

Another phobia of Doctor Johnson's was the dread of a possible medico-legal suit. There is no accounting for this, as never at any time was there ever any threat of such action. It is true that he went to an extreme in protecting himself. It was required of every patient that he operated on to have signed and executed a very formidable and lengthy legal document completely absolving him from blame and responsibility in case of any complication resulting from his treatment. He rigidly refused to render treatment unless these papers were signed and he guarded and concealed them so cleverly that no trace of them has ever been found.

His prescriptions were also characteristic. He would not allow any drug store to print them for him but had them made up himself. His office hours were "until 10:00 A. M., 3:00 P. M., one hour in evenings commencing at dark." Across the top of the prescription was printed "not to be copied, shown, read aloud, told or refilled."

There are few men who will be remembered as vividly as Doctor Johnson. So many amusing anecdotes have been told about him that already his character is legendary. I cannot but help repeat his advice to me when I began my lectures at the Medical College. Among other things he told me to be sure to gain the attention of audiences at the beginning of the lecture. He illustrated by reciting an experience he had once in addressing a meeting of the King's Daughters. He said the meeting was very dry and he knew he would have difficulty in gaining the attention of that particular group of staid, older ladies who were present. He began his talk by saying, "Once when I was in a whore house —." Then came a long pause. Immediately the air was electrified, he had their attention and went on to explain that he was called there on an obstetrical problem and he used this to build the basis for his subsequent remarks.

The following story illustrates his sense of humor and capriciousness. Doctor Johnson, at one time, overheard a very braggadocious salesman of the B. H. Worthen Arms Company boastfully describing his ability as a sharpshooter. Doctor Johnson sidled over



"Premarin"—a naturally occurring conjugated estrogen which has long been a choice of physicians treating the climacteric—is earning further clinical acclaim in the treatment of functional uterine bleeding.

The aim of estrogenic therapy in functional uterine bleeding is to bring about cessation of bleeding, and to produce subsequent regulation of the cycle. Once hemostasis is achieved, the maximum daily dosage of "Premarin" must be continued to prevent recurrence of bleeding. This schedule forms part of cyclic estrogen-progesterone treatment for attempted salvage of ovarian function.

"Premarin" contains estrone sulfate plus the sulfates of equilin, equilinenin, β -estradiol, and β -dihydroequilenin. Other α - and β -estrogenic "diols" are also present in varying amounts as water-soluble conjugates.



An "estrogen of choice
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is 'Premarin'
in tablets of 1.25 mg. ...

The usual dose for hemostasis
is 2 tablets three times a day.
If bleeding has not decreased
definitely by the third day of
treatment the dosage level
may be increased by
50 per cent."*

*Fry, C. O.: J. Am. M. Women's A. 4:51 (Feb.) 1949

"PREMARIN"®

*Estrogenic Substances (water-soluble)
also known as Conjugated Estrogens (equine)*

Four potencies of "Premarin" permit flexibility of dosage: 2.5 mg., 1.25 mg., 0.625 mg., and 0.3 mg. tablets; also in liquid form, 0.625 mg. in each 4 cc. (1 teaspoonful).

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to the salesman and asked him if he had ever shot bees. The salesman replied that he had not, but he was sure he could if anyone could. Doctor Johnson wagered that he was the better shot of the two. They retired to a pasture and took turns shooting the bees. Doctor Johnson could hit them, but the sharpshooter could not. The secret was that he had taken his small son along and every time it was his turn to shoot, the child would chuck a pebble at a bee and he shot them as they paused momentarily in the air.

And there is the story of the steam heated lunch box. Doctor Joe Waring told me of an experience that he had once when he was to accompany Doctor Johnson on an automobile trip. He asked Doctor Johnson where and how they would have lunch. Doctor Johnson told him that he had it all arranged. He had devised an apparatus whereby the box of lunch was screwed into the radiator of the car and was kept warm in this way.

A final example of the zeal of his work, the unselfishness of his nature and his desire to relieve suffering humanity, is the story of one of his little colored patients, Eddie Richardson, as told to me by Mrs. Johnson. Eddie was a pitiful case with such extremely deformed limbs he was unable to walk. He had "legs like a snake" and large calluses on his hands and stomach. Doctor Johnson spent \$10,000 in the rehabilitation of this child. He operated on him a number of times and grafted some bone from a sheep. The boy finally recovered. He was able to get about so well that he could dance the Charleston. His implicit faith in Doctor Johnson was such that after his recovery he returned and in all seriousness asked to be made white. Eddie Richardson is now grown and normal. He is married and has several children.

If, in this sketch, I have given the idea that this paper is a caricature of this noble man, I am sorry. That is not my purpose. Doctor Johnson was a great and good man devoted to humanity, devoted to his family and devoted to his God. He had a host of friends and those who knew him best loved him most.

He died suddenly of a heart attack on April 14, 1934, at the age of 63. I attended his funeral at his beloved Grace Episcopal Church that could not accommodate the vast throng of sorrowing friends and relatives who came to pay their last respects. There were many colored mourners, as well as whites. The esteem in which he was held by the grateful negroes of Charleston was further evidenced by a communication to the News and Courier shortly after his death. It was written by two colored citizens "in behalf of the negroes of Charleston" as a tribute to the memory of William Henry Johnson.

That he was eccentric there can be no doubt. Mrs. Johnson told me that Billy Smith had made the remark, "He is a genius and a crank but I like him." She added, "It may be so, but I loved him." As an example of his fidelity to Mrs. Johnson he told her the only epitaph he wanted on his tomb was, "He married Lottie."

I hope that you have enjoyed this paper as much as I have enjoyed its preparation.

In closing, I would like to quote from the resolutions as a memorial to Doctor Johnson, drawn up and presented to the Medical Society of South Carolina by Doctor Robert S. Cathcart, Chairman of the Committee appointed for this purpose.

"He practiced his profession for thirty-four years and his ethical standing was never questioned; he drew his patients from all walks of life and was as ready to aid the humble negro as the man of wealth. He was a pioneer in many lines of medicine and the medical students who came under his influence as a teacher left his classes with enlarged visions of the kind of service they could render suffering humanity.

Doctor Johnson was a deeply religious man and although he did not force his convictions on others, his intimates were aware of this basic quality in his nature. As an evidence we would quote from a prayer written by him to a young boy:

"Let us pray our prayer together:

Attune Thyself O Lord to the vibrations of the souls of Thy audacious supplicants, and

Grant us those things which are best for us.

Teach us what Thou wouldst have us do.

Give us the desire and power to accomplish the same, as by right we should.

Vouchsafe to us a full measure of ability, happiness, health, prosperity, temperance, faith, hope, charity, humility, industry, aggressiveness, self-respect and contentment as is good for us, we ask in the name of Thy holy Son, Jesus Christ, Amen.

This may sound preachy but it is not. It is but a vibration from chordae tendinae (heart strings) which are in unison with yours."

Doctor Johnson was an extremely modest man and would never seek the praise of his fellows, and so, to live each day to the fullest, to deal honestly with all men, to be loyal to his friends, to deal gently with the erring and give of his wisdom to those needing help, to love all men and rejoice in every advance made by men in his beloved profession—this was William Henry Johnson's creed and by it he lived and will always be remembered by his friends."

Presented before The Columbia Medical Club, Columbia, South Carolina, by Doctor Austin T. Moore, January 15, 1951.

DEATHS

WILLAM EUGENE KING

Dr. William Eugene King, 63, of Aynor, died suddenly on May 27, at his summer home at Murrell's inlet. He had been in failing health for the past few years.

A native of Florence County, Dr. King received his education at Furman University and the Medical College of South Carolina. Following the completion of his medical training he opened an office in Aynor where he carried on an extensive general practice up until the time of his retirement.

Surviving Dr. King are his widow, a son and two daughters.

CORRESPONDENCE

Julian P. Price
Secretary, Medical Association
105 W. Cheves Street
Florence, S. Carolina
My Dear Mr. Price:

To keep military Reserve Medical Officers of the Armed Forces, Army, Navy and Air Force posted on the latest developments in the Field of Medical Science, the Second Annual Medico-Military Symposium will be held at the U. S. Naval Hospital, Philadelphia, Pennsylvania from 22-27 October 1951.

Commodore Richard A. Kern, MC, USNR, Professor of Medicine, Temple University School of Medicine and Chairman of the Symposium General Committee will preside over the opening session and introduce the speakers as listed on copies of enclosed preliminary schedule for Monday afternoon 22 October 1951.

It is urged that officers make hotel reservations well in advance, since no government housing facilities will be available. The final session of the Symposium will be held Saturday morning 27 October, leaving the afternoon free for officers to attend the Penn-Navv football game.

Would you be so kind as to publish the invitation to this medical meeting in your journal.

Thanking you very kindly, I remain

Sincerely yours,
M. H. Porterfield
Captain, MC, USN
Medical Reserve Program Officer

NEWS ITEMS

The sixteenth annual assembly of The United States Chapter of The International College of Surgeons will be held in Chicago on September 10th through the 13th, 1951, with headquarters at the Palmer House.

An excellent program has been arranged. Prominent surgeons from the United States and other countries will participate. Scientific sessions will be held by

Carolina Rest Home Hospital



A COMPLETELY NEW
FIREPROOF HOSPITAL—
SPECIALIZING IN THE
TREATMENT OF NERVOUS
DISORDERS AND
ALCOHOLIC PROBLEMS
WITH A PERSONAL
FOLLOW UP.

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MEDICAL DIRECTOR

U. S. #1 South, Box 188

WEST COLUMBIA, S. C.

all specialty sections of the United States Chapter.

The annual banquet will take place on Wednesday evening, September 12. Mr. Lawrence Abel, F.R.C.S. (Eng.), of London, will be the principal speaker.

The assembly will conclude with the convocation, to be held in the Civic Opera House on the evening of September 13. Senator Estes Kefauver will deliver an address on "The America of Tomorrow."

Hotel reservations may be arranged by writing to the Housing Division, Chicago Convention Bureau, 33 North LaSalle Street, Chicago 2, Illinois.

**COURSES IN EXFOLIATIVE CYTOLOGY
(CANCER DETECTION)
CORNELL UNIVERSITY MEDICAL COLLEGE
1300 York Avenue
New York 21, N. Y.**

September 17—December 14, 1951
March 3—May 29, 1952

These two courses will be open to a limited number of physicians and technicians. They will cover the cytology of the female genital, gastrointestinal,

respiratory, and urinary tracts, as well as exudates. Instruction in laboratory procedures related to cytology will also be given. Tuition for each course is \$300.00.

Arrangements for shorter periods of instruction covering all or certain applications of exfoliative cytology may be made for those physicians who cannot come for the entire three months. Applications may also be submitted for the study of our cytologic material for varying lengths of time during the rest of the year, except for July and August. The tuition in these cases will depend upon the length of time desired for training.

Instruction will be given by Dr. George N. Papanicolaou, Dr. John F. Seybolt and their associates.

For further information and application blanks, write to:

Dr. John F. Seybolt
Department of Anatomy
Cornell University Medical College
1300 York Avenue
New York 21, N. Y.

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of the

South Carolina Medical Association

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OCEAN FOREST HOTEL, MYRTLE BEACH, S. C.

MAY 15, 16, 17, 1951

HOUSE OF DELEGATES

Tuesday, May 15, 1951

Call to order—Dr. W. R. Tuten, President, Presiding:

Report of Credentials Committee—Dr. Wm. Barron, Chairman.

	No. Present
Past Presidents -----	8
Council Members -----	14
House of Delegates -----	35
Total, which represents a quorum-----	57

REPORT OF BUSINESS MANAGER AND COUNSEL

Mr. M. L. MEADORS

With the addition at the last annual meeting of the duties of Business Manager of the Association to those already being borne as Director of Public Relations and Counsel, the activity, effort and expenditure of time necessary to carry on the work of the office has been greatly increased. Fortunately, during the same period there was less pressure from the legislative angle, in the absence of any strenuous effort on the part of the Administration forces to secure enactment of Compulsory Health Insurance and the allied proposals.

Beginning shortly after the meeting in 1950, the business of collection of dues for the State Association was transferred to our office. This, of course, was handled as an adjunct of the office of Dr. J. Howard Stokes, Treasurer, but the work was done by the staff already employed, and full membership records have been kept in our office since that time.

As of Saturday, May 12, a total of 846 members had paid their dues for 1951 to the State Association. As of the same date 1,043 had paid their dues for 1950, leaving less than 25 delinquent for 1950. Undoubtedly, as in the past, an additional number will pay 1951 dues during the next two days, while attending this meeting. So, the prospect for the total membership for the current year is excellent. The matter of membership in the State Association is of more than usual importance this year because of its effect upon our representation in the House of Delegates of the American Medical Association. Under the present apportionment, each state medical association is entitled to one delegate for each 1,000 members or fraction thereof who are likewise dues-paying members of A.M.A. South Carolina now has two delegates. The number of delegates for terms beginning in 1952 will be determined on the basis of the total paid membership of the national organization as of approximately November 1, 1951, and the A.M.A. has ruled that

dues for 1951 will not be accepted as long as the member is delinquent for 1950. In view of this ruling, therefore, it will be necessary for more than 1,000 members to have paid their dues for 1951 as well as 1950 by the deadline date in November, if we are to retain our present quota of two delegates in the National House. In the early part of this year we were notified that members whose 1950 dues had not been paid by February 28, 1951, would be automatically dropped from the roll, and that for reinstatement the payment of dues for both the years 1950 and 1951 would be necessary. This information was immediately relayed to the secretaries of the county and district societies and resulted in the collection of a large additional number of dues. According to the progress which has been made in the first few months of the year, there seems to be every reason to expect that we will without great difficulty reach the necessary 1,000 within the required time. Special attention should be given to this, however, and it should be kept in mind by the county officials, to the end that, not only membership in the state organization may be kept at its present level, but also that we may retain the representation, which at best is small enough, in the House of Delegates to the American Medical Association.

The business activity of the office this year has been further complicated by the necessity to collect not simply the State Association dues, but also those of the A.M.A. This has amounted to almost exactly double the quantity of work which has been necessary in past years in connection with collection of State dues. Dues to the A.M.A. are \$25.00, and therefore more than those of the State organization. There have been numerous questions addressed to the Treasurer's office and referred to the Business Manager, arising out of the status of physicians who for one reason or another feel that they are entitled to be excused from payment of dues to the A.M.A. This, in turn, has required repeated re-examination of our files with respect to the members of the State Association who are retired, disabled, or in Service. According to the ruling of the A.M.A., no active member of that body can maintain his membership without paying dues, unless for stipulated reasons he is excused likewise from payment of his dues to county and state societies. A great deal of the time of the Business Manager and the staff has been taken up in the effort to find the answers and satisfy the inquiries of physicians with respect to this. All such inquiries have been given individual attention and specifically replied to, whether they came from the county secretary or the individual physician. That is, replies have been made in all cases, with the exception of a few which came

in within the past few weeks and which could not be handled routinely but required some investigation, for which there has not been time.

As of May 12th, the number of members of the South Carolina Medical Association who had likewise paid dues to the A.M.A. for 1950 was 1,031 and those who had paid for the year 1951 was 792. As will be observed from the above figures, the idea of paying dues to the national organization seems to have been generally accepted by the physicians in South Carolina. We believe that this report compares favorably with those of the majority of the states so far as the collection of A.M.A. dues is concerned.

A list of the members who paid dues each month is sent, shortly after the first of the month following, to Dr. Heyward, as Secretary of the State organization. A similar list is sent to Dr. Lull, Secretary and General Manager of the A.M.A., to give his office the record of the number of members in good standing in the State organization from time to time. Obviously, it is likewise necessary to send to Dr. Lull a complete list of those members paying dues to the A.M.A. along with the remittance which is forwarded to him monthly.

The practice was adopted early after the work was taken over by our office of acknowledging receipt of every remittance from the county secretary or otherwise, and of course membership cards are mailed direct to the individual physicians to whom they are issued.

In addition to amounts realized from dues, as indicated by the foregoing, we handled again this year, of course, the commercial exhibits which are on display at this meeting. The number of exhibit spaces was increased and a total of thirty-eight was sold for \$3,225.00, all of which amount has been collected and deposited in the bank. It should be borne in mind that the expenses of this meeting are more than covered by the amount realized from the commercial exhibits. These advertisers make this meeting possible without dipping heavily into the funds of the Association. The members are urged, therefore, to cooperate with the Exhibitors by visiting the displays at some time during the meeting. As in the past two years, valuable prizes will be awarded on Wednesday evening to the holders of numbers to be drawn at that time, and tickets may be obtained at each Exhibitor's booth. Of course the purpose of this drawing is to stimulate the interest of the physicians in the exhibits. The tickets, therefore, are intended only for physicians, and not for others, and each Exhibitor is requested to issue only one ticket to each doctor. Your cooperation in this matter will add greatly to the efficiency of what we are trying to accomplish in this connection, and to its fairness to all members of the Association.

Several months ago Council authorized the offering for sale to the public libraries in the State, and to certain book-dealers, the remaining copies of the History of the South Carolina Medical Association, prepared by Dr. Joseph I. Waring for the Centennial Meeting in Charleston three years ago. A letter prepared by Dr. Waring, was mailed to each library in the State. The response has not been great, but up to the present time we have sold Histories at \$3.50 each, for a total of \$23.00. Funds received from this source are to be turned over to Dr. Waring for the work of the Historical Committee.

We are still handling automobile emblems for the convenience of the members of the Association, and since the last meeting have disposed of 47 emblems, from which the sum of \$152.75 was realized. These are purchased through the A.M.A. at a cost of \$3.00 each, and are sold to the members of the Association for \$3.25, the amount necessary to cover the postage and cost of handling.

A few directories have been sold from time to time to commercial advertisers and others. Public Relations and Legislation

The other phases of the duties of our office have continued to be handled very much as in the past. Last year Council authorized the purchase of rights to the use of a film prepared by the Michigan Medical Society, and the expense of its booking for exhibition in theaters in South Carolina. A thousand dollars was appropriated for the purpose, and with this, bookings were arranged for a total of 53 theaters in the State. According to reports which were furnished us regularly during the fall months, when the picture was being shown, it was viewed by a total of 38,944 people. This picture, entitled "To Your Health," was a short-reel type similar to the "March of Time" and other news briefs, and was prepared in such a way as to point out in an attractive manner the advantages of the free practice of medicine and the disadvantages of compulsory health insurance. Most of the theaters in which the film was booked were in the smaller towns, and a number of them were drive-ins. In this way an audience was reached which perhaps could not have been contacted in any other way with the message the medical profession has to tell with respect to socialized medicine. The moving picture, particularly the type of film to which we have referred, is perhaps the only medium which would ever retain the attention of the people who frequent these theaters for a sufficient length of time to get the message across. While they may not be of particular influence in their communities, nevertheless they have votes of their own and can make themselves heard. We believe the money authorized by Council for this purpose was well spent and that repetition of the use of similar films of this type in the future would be highly desirable.

Last Fall, when the President's Reorganization Plan No. 27 was submitted to Congress, we took an active part in securing expressions from members of the medical profession and their friends in the State, to the Senators and other members of the House of Congress in opposition to this measure. As will be recalled, it was roundly defeated by an even higher majority than Plan No. 1 the previous year. The vote this time came in the House of Representatives, and while not all the members of that body from South Carolina voted, it should be remembered that the vote was taken on the eve of the primary election in this State and many of the incumbent Congressmen were at that time home working in their own political interests. Most of them, however, had arranged pairs for their votes, so that the effect of their opposition to the measure was not lost.

During the session of the South Carolina General Assembly just closed, we have, as in the past, received in the office the daily Journals and Calendars of both the Senate and the House of Representatives, and these have been carefully and regularly checked. During this Session hardly any measure was introduced which would have had any material effect on the medical profession. One possible exception was that embodied in the Governor's Reorganization Plan No. 9 which was submitted in April, designed for the purpose of establishing a State Department of Licensing and Examination, and to consolidate therein the original, or copies, of the records, minutes and files of the Board of Medical Examiners and fifteen other examining boards. While the Plan specifically provides that it shall not take from, add to, nor alter in any way the duties or authority of the examining boards concerned, it also provides for the filing with the Secretary of State, as ex-officio Executive Secretary of the proposed new Department, all of the minutes or copies thereof, together with the record of

all proceedings by the various boards. All licenses would be issued by the Secretary of State in the name of the new Department.

Under the law pursuant to which this plan was submitted to the Legislature by the Governor, all that is required for its adoption is the passage of a Concurrent Resolution by both Houses, within forty legislative days following its introduction. A Concurrent Resolution requires only one reading in each House and not the customary three readings necessary for a Joint Resolution or Bill. On the day following presentation of the plan to the Legislature, therefore, we wired key physicians in each county, suggesting that they contact the members of their legislative delegations and request their opposition to the plan. Whether or not it should be ultimately found agreeable to the medical profession, obviously it was a matter which was entitled to mature consideration by the doctors, as well as those interested in other boards concerned, before its adoption into Law. No action was taken on the matter prior to the adjournment of the 1951 Session.

We received regularly, also, the Congressional Record, the News Letter of the Washington Office of the A.M.A., and other publications bearing upon the medico-political activities of the government, and pending legislation; and through these media we have undertaken to, and believe we have succeeded fairly well in keeping abreast of the developments along this line.

Through a news-clipping service to which we subscribe, we keep closely in touch with matters of interest and concern to the profession which are publicized in the newspapers of the State. These clippings are received weekly and in many instances are the only source of information reported to our office from which the deaths of the members of the Association are obtained. This is reasonably accurate, but it is not completely so and we would like to suggest that the county secretaries send in to the state office as early as possible following the event, notice of retirement from active practice, death or onset of disabling illness of any member of the Association.

Last Fall, upon the organization of the Committee on Military Service, pursuant to the action of a special meeting of this House of Delegates, we cooperated with Dr. Owens and members of his Executive Committee in the preparation of a questionnaire for the purpose of obtaining the necessary information from all doctors in South Carolina, as the basis for determining their availability for military service. Following the work on the composition of the questionnaire, in cooperation with the Executive Committee, it was mimeographed and mailed in duplicate from our office to each doctor in the State. Questionnaires were returned by the physicians to Dr. Heyward as Secretary of the Committee.

Immediately upon announcement by Washington of the dates for registration under the Doctor-Draft Act in September and again in January, we prepared and mailed mimeographed letters to each member of the Association calling attention to the requirements and giving such other information as was available for his assistance in determining when and where to enroll.

In February, in company with Dr. Owens, Dr. Thackston and others, we attended the two-day meeting in Washington of representatives of state advisory committees to Selective Service, arranged by the National Advisory Committee. This meeting was designed for further study of requirements of the Doctor-Draft Act, and clarification of a number of questions which had arisen thereunder.

We continued to cooperate with the Committee on

the Industrial Fee Schedule, Dr. Frank C. Owens, Chairman, and attended several meetings of that Committee during the year. Following publication of the suggested fee schedule after its approval by the South Carolina Industrial Commission, we obtained and mailed to each member of the Association from the office in Florence, a copy of the fee schedule for his guidance.

Following a meeting of Council the early part of this year, at which the call of a special meeting of the House of Delegates was directed, we prepared in mimeographed form and mailed to each delegate, the Report of the Committee on the Care of the Indigent, Dr. J. K. Webb, Chairman. Subsequently and upon its authorization by the House of Delegates, we prepared at the request of Dr. Webb, a draft of the proposed bill for the purpose of instituting the plan. This was submitted by Dr. Webb's Committee to the Governor.

In October of last year we attended the Legislative Conference for the Southeastern area held in Atlanta, under the auspices of the American Medical Association. At this meeting we heard discussions by Dr. Joseph S. Lawrence, Director of the Washington office of the A.M.A., and others of his staff, of the status of legislation then pending in the National Congress, and suggestions as to what might be expected in the coming months. This was a one-day conference with representatives from most of the Southeastern states in attendance. Perhaps the most interesting discussion developed at that time was the one with respect to the position of the medical profession on Federal Aid to Medical Education. The members of the group were invited to express their individual views on the sort of financial aid which might be secured and which would most nearly fill the requirements. The wide variation of the views expressed pointed up more clearly than anything else could have done, the difficulty of the problem at hand—one which, incidentally, at that time, was proving one of the most embarrassing problems currently faced by the profession.

Last June we attended the annual meeting of the American Medical Association in San Francisco, and participated in the activities of the several organizations there. Of particular interest was the installation of Dr. Julian P. Price as President of the Conference of Presidents and Other Officers of State Medical Associations. Dr. Price has served in that capacity this year and will preside at the Conference, for which a most interesting program has been arranged, at its June session in Atlantic City.

In December, we attended the sessions of the A.M.A. in Cleveland, the Public Relations Conference and the Conference on the National Education Campaign held in conjunction therewith. The official registration at the meeting showed that it was attended by forty Executive Secretaries of States and the District of Columbia, and seventeen executive secretaries of county medical societies. Thirty-three states and eighteen counties had lay representatives of some sort, with a total of seventy lay representatives in attendance. Your Director, of course, was the only one from South Carolina.

The Conference to which reference has just been made was notable for two things and in this general report on the legislative and public relations activities of the Association, it may be permissible to dwell very briefly on these two events. The first was related to the matter just referred to, the embarrassing question of aid to medical schools. At the A.M.A. session in Cleveland, announcement was made by the Board of Trustees of the appropriation of a half a million dollars to serve as the nucleus of a fund for the use of medical schools throughout the country in need

of financial assistance. The fund was expected to be supplemented by contributions large and small from corporate and individual interests, both within and without the profession. The extent of the progress which has been made thus far is uncertain, but the appropriation of this sum by the Board of Trustees of the national medical organization served at once a two-fold purpose. It gave notice to the supporters of the Administration's proposals of the medical profession's willingness, as well as its ability to assume active leadership in the solution of this problem according to the voluntary American way, just as it has taken the lead in the effort at the solution of the problem of the cost of medical care, through its endorsement and sponsorship of the non-profit hospital and medical care plans. If we may express an opinion, nothing the profession has done could have been any more effective in proving to the American people its sincerity of purpose in the desire to retain the principles of freedom in both medical education and the administration of medical care.

The other event of importance in Cleveland was the address of the President of the Carpenters and Joiners Union of America, Mr. William L. Hutcheson, who is also a Vice-President of the American Federation of Labor. In this address, he endorsed without reservation the stand of the medical profession with respect to socialized medicine. This is not an unimportant union, it is affiliated with perhaps the greatest labor organization in the country, and the announcement by its President in the language used in his address was one of the most significant things which has happened in the fight against socialized medicine within the past few years. This marks the going upon record of at least one unit of organized labor on our side, and it indicates the beginning of a change of view, which we believe must necessarily become widespread as the members of the various labor organizations begin to reason out this issue for themselves. Mr. Hutcheson closed his address with these words:

"We in the labor movement have our own cross of regimentation to bear. The fight you are making is part of the same war. It is a war against concentration of authority in a few hands in Washington. As a veteran of forty years in the labor movement, I know what it is to fight for human rights. I am happy to take my stand beside you."

One other heartening announcement was made by Whitaker and Baxter in a report submitted about the same time. The so-called "one-shot" advertising campaign organized by this firm on behalf of the A.M.A. last Fall met with varied response. Judging from some expressions at the Cleveland meeting, many people connected with the profession thought it was excellent; others were able to see little value to be derived from it. The report which seems to us, however, of particular interest, was that with reference to the extent of advertising bought by others outside the profession in connection with the same campaign. According to Whitaker and Baxter, 65,246 individual advertisers, exclusive of the medical profession, participated through tie-in ads. They used a total of 1,186,594 inches of advertising space and paid for it a total of \$2,019,849.00. These are substantial figures in anybody's bookkeeping. They indicate again the increasing cooperation that is being given the medical profession by its friends outside.

We have continued to keep in touch with the Whitaker and Baxter campaign and have cooperated with them when the opportunity presented itself. Material has been supplied when requested to individuals and to organizations seeking information on the subject of compulsory health insurance.

We have made a number of talks at meetings of

various organizations, some outside the profession, some woman's auxiliaries, and several county medical societies. Activities through the speakers' bureau have not been kept up during the past year. The issues have not been uppermost in the minds of the people, there has been no immediate danger of enactment of the feared legislation, and we have gone upon the theory that a let-up in the concentrated effort to take the message to the public on every occasion was in order and would result in a more effective use of the material at a later date when the need for it is more urgent.

We cooperated with the State Chamber of Commerce of South Carolina in launching its Americanism program. Pursuant to an invitation received from the Secretary of that organization last Fall, we requested Dr. Heyward to attend a meeting, your Director being out of the State and unable to do so. Subsequently, a letter was written expressing this organization's sympathy with the movement then underway. Through this medium and other contacts, some of which have been made available through our membership on the Boards of Trustees of the Blue Cross and Blue Shield Plans, we endeavored to keep the connection and coordinate the efforts of the medical profession with its friends in business and the other professions in the fight against communism and the socialization of America.

We have continued to work closely with Blue Shield and Blue Cross, attending regularly the meetings of the Boards of both organizations, and serving as chairman of the Actuarial Committee of the Blue Shield Plan. Last month we attended in Biloxi, Miss., the annual conference of Blue Shield and Blue Cross Plans and were greatly impressed with the active interest of physicians from practically every section of the United States in the nonprofit medical care plans represented by the Blue Shield insignia. These Plans appeared to be growing in interest and in serviceability. Important, progressive, far-thinking physicians are giving active interest and effort to their promotion and toward making them the success that they are becoming.

We have continued to prepare the Ten-Point Program Department of the Journal of the State Medical Association. Customarily, we merely mention this in the report in passing. Perhaps that is all we should do now. Upon looking through a yearly bound copy of the Journal a few days ago, however, we were impressed with the titles of some of the articles which have been carried in that Department of the Journal throughout the 12-months period. We respectfully submit to the members of this body that if they are genuinely interested in the economic side of the practice of medicine they will, occasionally at least, find in the department articles of value and interest. We feel that we can afford to make this statement in view of the fact that many of the articles carried there are reprints. Having access to most of the medical and related publications in the country, we undertake to select therefrom some of the most pertinent articles and present them to you through the pages of your Journal in this department.

We have prepared a column on legislative news for the Bulletin of the Pee Dee Medical Association, and this has been carried regularly each month.

Again, and we believe with reasonable success, we have continued editing the Bulletin of the Woman's Auxiliary to the South Carolina Medical Association. Mrs. A. F. Burnside, President, and other officers of that organization have expressed their appreciation of our efforts and seem to feel that the Bulletin is worth while. It has received recognition in more than one instance from other states and from officials of the National organization of the Woman's Auxiliary.

In October we cooperated with the health educators in the Pec Dee section in connection with a school health conference which was held in Marion. Through our efforts, a quantity of literature and an exhibit were obtained from the Medical Education Bureau of the A.M.A. for display at this conference. The cooperation of the Medical Association in this particular seems to have been appreciated, and we believe that expansion of this activity will prove of value.

We conferred at length upon his visit here a few weeks ago, with Mr. Aubrey Gates, representative of the National Rural Health Committee of the A.M.A. Mr. Gates is on loan to the A.M.A. from the Extension Service of the University of Arkansas. He has had wide experience in rural education and is conversant with the problems relative to rural health. He came to us with a number of suggestions which he is taking to various organizations throughout the country, and seemed to be genuinely impressed with the record of what had already been accomplished in South Carolina, in the organization of a State Health Council, and in other related activities.

On his recent visit to the State, we arranged an interview for Dr. John W. Cline, President-Elect of the American Medical Association, with Governor Byrnes. The conversation, we understand, was mutually satisfactory.

Of course a considerable part of the business activities of the Association already were being handled by our office along with the public relations and legal phases. Transfer there of the remaining administrative duties seemed a logical move. The need for a permanent, administrative office is more essential than ever now with the added work and necessary records incident to collection and accounting for dues to the American Medical Association.

We would like to express our thanks to Dr. J. Howard Stokes, Treasurer, for his assistance, and to Dr. N. B. Heyward, Secretary, for his cooperation in the phases of our work in which they respectively were concerned.

From the business standpoint, the record of paid-up membership in both the state and national organizations leaves no doubt that it has been a successful year. The quiet which has prevailed on the legislative front seems to indicate the same with respect to our public relations.

With the continued support of Council and the officers, which we have enjoyed the past year, there is every reason to expect continued successful and profitable operation of these phases of the Association's program.

Respectfully submitted,

M. L. Meadors

REPORT OF THE SECRETARY

N. B. HEYWARD

Mr. President, and Members of the House of Delegates.

This past year, as your Secretary, has been a very pleasant one. I have come in contact with the workings of the Association and have found them most interesting, and not too hard to administer. With the consent of Council, I was authorized to choose certain duties assigned to the Business Manager, which I wished to administer from my office, in Columbia. The remaining duties, outlined by the changes in the By-Laws of last year, were administered from the Business Manager's office, in Florence.

I have attended and acted as Secretary to all meetings of Council, excepting the first one, and to the

two called meetings of the House of Delegates, one to form the Military Committee of the Association, and the other to consider the adoption of the report of the Committee on the Care for the Indigent.

I have visited quite a number of County and District Societies, renewing old friendships and making new ones. I spoke of the affairs of the Association, trying to thus create more interest in them and to stimulate the members of these groups to take a more active part in the conduct of State Association affairs. Too much is left to the discretion of Council. If more interest is not shown the affairs of the Association will be shifted from the control of the Medical Profession and administered by a layman.

The Secretary of the American Medical Association informs me that there are 1186 members who have paid the State and A.M.A. dues, for 1950, and 171 who have not paid the A.M.A. dues. Our representation in the House of Delegates of the A.M.A. is dependent upon the number paid up by December 1st of each preceding year. We are entitled to one delegate for each one thousand paid up members, and a second delegate for any additional fraction thereof. We have two delegates for 1951. The number who pay their 1951 A.M.A. dues will determine the number of delegates we will have next year.

I would request that the House of Delegates discuss and plan some solution to the Negro question. We are having it in our schools, on our trains, and now it is in the lap of the medical profession. I have an inquiry, concerning the Negro problem, from one of our county hospitals, and another from a neighboring state, asking what course is to be taken by the South Carolina Medical Association. A resolution passed by the Palmetto Medical, Dental, and Pharmaceutical Association of South Carolina, in recent session, has just been received, asking admission of its members to the South Carolina Medical Association, since this is the only method by which they can become members of the American Medical Association. Some action on this resolution should be taken. Council has discussed the matter and has a recommendation.

Some complaints have been received on the shortage of doctors, but Dr. Frank Owens and his Military Committee are doing a good job in classifying the physicians of the State, and in preventing injustices in the drafting of essential doctors.

The finances seem to be in good order, in spite of the fact that there is reduplication of office help, in order to maintain two secretarial offices, one in Florence, and one in Columbia. In the financial statement of the Association, published in the April Journal, I, personally, am charged with spending \$1,093.40. This was the expense of my office and consists of typist salaries, extra help, office equipment (a typewriter and two filing cabinets), office supplies, telephone and telegraph bills and mileage for visits to component county societies. The Florence office spent approximately \$17,300.00 for similar services. This would appear to be excessive and if the offices could be combined, expenses could be reduced and possibly our State dues reduced. The \$25.00 dues to the A.M.A. which is now compulsory, have financed the publicity and legislative programs of the A.M.A. and have cut down the necessity of much of these activities of the State Association.

An effort to change our Medical Practice Act was made by the Legislature in order to force the Board of Medical Examiners to admit a graduate of a grade "B" medical school to the examinations, for the purpose of obtaining a license to practice medicine in South Carolina. Due to the prompt action of your President, Dr. Tuten, of your Legislative Committee, and of a number of the members of the Columbia

Medical Society, this effort was defeated, and a compromise effected which seemed to please all parties concerned. He will not be admitted to the examinations until graduation from a Grade A school. Reorganization Plan No. 9 of the general reorganization plans of the State Government is number one on the agenda of the House when it reconvenes in January 1952. Under this Plan the Secretary of State issues all licenses of all State Licensing Boards, from a central office located in the State House. All Records of all Boards would be moved to this central office. This Plan will require only one reading and becomes the law when passed by the House and Senate and signed by the Governor. We hope that this can be defeated, since the present plan is more economical, more efficient and of more service to the public, than the proposed plan could possibly be.

Respectfully submitted,

N. B. Heyward, M. D.,
Secretary

REPORT OF THE TREASURER

J. HOWARD STOKES, M. D.

To the Members of the House of Delegates:

Since the business or fiscal year of the Association is considered to run from January 1 to December 31, a report is filed for this period. This report is adequately covered in the audit which is herewith presented and which was published in the Journal of the South Carolina Medical Association in April 1951.

Several items in the report are worthy of repetition. On December 31, 1950 there was a bank balance of \$14,616.34 with \$15,000 in a reserve fund. Additional assets include a note of the South Carolina Medical Care Plan for \$10,000.00. There was a surplus of \$4,279.21 for the year. This report considers all sources of revenue, including those received from advertising contracts in the Journal. It must be remembered that this source of income is, at the present time, very substantial (\$11,496.67) but is subject to change, according to the distribution and amount of advertising.

With a total membership of 1,160, we were able to collect State dues from 1,043 in 1950, and A.M.A. dues from 1,031 members. Additional stimulation has been given toward collection of the A.M.A. dues since we must have more than 1,000 paying members in the A.M.A. if we retain two delegates in the A.M.A. House of Delegates.

The Treasurer wishes to thank each member of the State Association for his patience and cooperation during the past year. We are particularly indebted to the Secretaries and Treasurers of the component County Societies.

The Treasurer would like to pay tribute to the State Councillor and the members of the Business Office. Because of the voluminous and time-consuming correspondence which has passed through this office during the past year, the aid of the business office has been necessary daily. With the collection of approximately \$60,000.00 and the spending of approximately \$54,000.00 your State Association is in big business. It is quite inconceivable that any physician in active practice could adequately manage the affairs of the Treasurer's office without the aid of a well-equipped and efficiently managed business office. The bulk of business relegated to the Treasurer's office was taken care of by the Director of Public Relations, Mr. Jack Meadors, and his efficient staff.

Respectfully submitted,
J. Howard Stokes, M. D.,
Treasurer

REPORT OF COUNCIL

DR. O. B. MAYER, *Chairman*

Council has met four times since the adjournment of the annual meeting of the Association in May 1950.

The first meeting was held June 1, 1950 and was largely devoted to organizational matters arising incident to the amendments and changes in by-laws passed by the House of Delegates. The respective duties of the secretary and business manager-public relation officer were agreed upon and approved.

The various officers were called upon for estimated expenses for the year. The following were approved:

Officer	Salary	Office Expense
President	0	0
Vice-President	0	0
Treasurer	0	0 (included in Bus. Mgr.)
Secretary	0 \$1,500	(for clerical help and \$50 a month for rent if needed.)
Business Mgr. and Public relations officer	\$7,200	\$5,400
Editor	\$1,200	\$ 600
Total	\$8,400	\$7,500

Total estimated budget \$15,900, exclusive of travel expenses for delegates to meetings. It was further authorized that the secretary purchase necessary office equipment as files and typewriter, etc.

Travel expense of .05 a mile was approved as usual for the secretary, treasurer, and business manager.

The travel expense of delegates and representative to the American Medical Association or other necessary meetings was allowed as usual. A copy of these minutes appeared in the October 1950 Journal.

Council met again August 16, 1950 and endorsed the resolution of the Greenville County Medical Society, regarding the military status of the A.S.T.P. and like category physicians.

Dr. W. L. Pressley was appointed to represent the association in all military matters until a permanent committee could be set up after the military policy was more clearly defined.

General Dozier was forwarded three names from which to choose a liaison officer for Civil Defense, if so desired.

The third special meeting was held September 7, 1950 to further discuss the formation of a military committee to advise and help the military in the selection of physicians for service.

Dr. Pressley stated he was unable to further serve on the military committee and council regretfully acceded to his wishes.

Dr. Julian Price submitted a plan for a state wide military committee consisting of representatives from each of the 14 Judicial districts with an executive committee of three. This plan was endorsed by Council and further moved that the plan be presented at an early date to a call meeting of the House of Delegates.

This plan was subsequently adopted by the delegates. The minutes of both meetings (special) appeared in the February 1951 issue of the Journal.

The fourth meeting was held January 8, 1951 for the chief purpose of considering a report of Dr. J. K. Webb, Chairman of the Committee on Care of the Indigent. After thorough discussion the plan was approved by council with the recommendation of its adoption by the House of Delegates who would be called in special meeting to consider the matter while the State Legislature was in the early phase of its session.

On request of the Department of Public Welfare a five dollar fee was approved for examination and report of the indigent.

Dr. Ben Wyman presented the current plan for the medical phase of Civil Defense. A representative from each councilor district was named on a committee to meet with Dr. Wyman. Each would then aid and help coordinate the organizational plan in his district. Those named were:

- District 1. Dr. William M. McCord, Charleston, S. C.
- District 2. Dr. W. T. Barron, Columbia, S. C.
- District 3. Dr. W. C. Bishop, Greenwood, S. C.
- District 4. Dr. Ned Camp, Anderson, S. C.
- District 5. Dr. Roderick MacDonald, Rock Hill, S. C.
- District 6. Dr. Charles A. Mobley, Orangeburg, S. C.
- District 7.
- District 8. Dr. Oscar Z. Culler, Orangeburg, S. C.
- District 9. Dr. G. Wardlaw Hammond, Spartanburg, S. C.

Council believes the association has made strides during the year, a spirit of understanding and cooperation has existed. No unusual matters have been brought to us.

The financial conditions of the association remains sound. The auditor's report for the year 1950 appeared in the April 1951 Journal. It shows a bank balance January 1, 1950 of \$10,777.78 and December 31, 1950 a balance of \$14,616.74, showing grossly a cash surplus of \$3,838.56, for the operating year 1950, and a note for \$10,000.00 as a loan to the South Carolina Medical Care Plan. The association owns \$10,000.00 of Defense Bonds and has \$5,000 in a loan association. The association also owns \$3,500 of furniture and equipment.

The Journal has appeared in the usual 12 issues. It shows departmental growth and stresses current information of state medical affairs and the status of national events effecting socialized medicine. The scientific articles were on a high level. The Journal showed a net operating surplus of \$6,579.40 for the year 1950.

The Council met in annual session yesterday with all members present.

The affairs of the association were found in excellent condition.

A communication was received from the Palmetto Medical, Dental and Pharmaceutical Association requesting that their physician members be accorded membership in the South Carolina Medical Association. This matter was seriously and thoughtfully considered and Council recommends the adoption of the following resolution:

1. WHEREAS: the Palmetto Medical, Dental and Pharmaceutical Association of the State of South Carolina has memorialized the South Carolina Medical Association requesting that negro physicians licensed to practice medicine in South Carolina and who are in good standing in the Palmetto Medical, Dental and Pharmaceutical Association be granted the privilege of membership in the South Carolina Medical Association, and;

WHEREAS: the House of Delegates recognizes the factuality of statements made in the preamble to the resolution requesting such privilege of membership, but;

WHEREAS: it is recognized that there are many difficulties involved in granting this privilege which will require serious study for their resolution, and realizing further that some of these are beyond the power of the state association to remove;

Now, THEREFORE BE IT RESOLVED that a committee consisting of the President, the Chairman of the Board of Trustees of the Medical College of the State of South Carolina, and the senior delegate of the state association to the House of Delegates of the American Medical Association be designated to serve with a committee from the Palmetto Association and

to study this entire matter from all angles and to report back with recommendations at the 1952 meeting of the House of Delegates.

Council also makes the following recommendations:

2. That a special committee on Constitution and By-Laws be appointed by the President to review and bring up to date the Constitution and By-Laws with an idea of a revised publication, the last one having been made in 1944.

3. That the Historical Commission be permanently continued to preserve and record such historical information as would best serve, and preserve the records of this association.

4. That the report of the committee, appointed by Council to study the advisability of the creation of a Grievance Committee for the State Medical Association, be adopted and that the chairman of that committee, Dr. Roderick MacDonald, be accorded the privilege of presenting his committee's report to the House of Delegates for their consideration.

5. Council recommends that the President appoint a committee to work in cooperation with a similar committee from the Academy of General Practice towards establishing a state owned and operated hospital for the treatment and rehabilitation of alcoholics.

6. Two representatives of the Association of American Physicians and Surgeons appeared before Council at the request of Dr. T. G. Goldsmith. After hearing their aims and purposes, Council agreed that these gentlemen should be given an opportunity to present the matter to this House of Delegates. Council believes that from 15 to 30 minutes will be necessary.

7. In accordance with the By-laws of the South Carolina Medical Care Plan, Council nominates the following to fill vacancies in the Board of Directors of the Plan: Dr. J. Howard Stokes and Dr. C. R. F. Baker to succeed themselves; Dr. T. G. Goldsmith to replace Dr. W. T. Barron, resigned; Mr. Waddy Thomson, Jr., for Mr. W. C. Edwards, resigned; and Mr. T. R. Gilhooley for Mr. Earle Britton.

8. Council received from several sources suggestions that the association should donate a substantial sum to the American Medical Association Educational Fund. Since the Constitution provides that Council is the Financial Committee, Council requests that this House of Delegates approve the proposal to donate \$5,000 to this worthy cause, believing it is a right step and will serve a most useful purpose, not only for better public relations but also towards building up a fund which the Medical College of our State will receive.

9. Council recommends to the House of Delegates the formation of a standing committee composed of the Editor, Vice-President, and Secretary to give daily news releases, through its public relations officer, to the daily press of such happenings of the annual state meeting as seem appropriate. Our scientific and political interest would be guarded by such committees. The public wants the news, the association needs the public relations. This custom is followed by many of the leading associations.

10. Council was requested to endorse the American Medical Association's policy of ethics regarding the employment of full-time physicians by hospital boards. Council heartily approves of the stand taken by the American Medical Association and it is understood a resolution, bearing on this, will be presented by a delegate from the Marion County Medical Society.

Council authorized the publication of a new directory of its members as has been published in the past.

The Chairman of Council thanks the various members and officers of the association for their cooperation and help in supervising the association's affairs for the past year and invites their ideas for the betterment of the association.

°Dr. Wilbur R. Tuten, Sr.

President, South Carolina Medical Association,
Fairfax, S. C.

Dear Dr. Tuten:

At the 55th annual convention of the Palmetto Medical, Dental and Pharmaceutical Association, held in Columbia, S. C., April 24 through 26, 1951, the enclosed resolution was presented to the body in its final business session 26 April 1951, and approved and adopted as read.

It becomes my duty to forward this resolution, properly attested, to you as President of the South Carolina Medical Association, with the request that it be presented to the members of your association, for disposition.

Assured that you will consider as justifiable, the purposes as are set forth in this resolution; and, that you will use your influence to affect an affirmative reply, I remain:

Respectfully yours,
T. C. McFall, M. D.
President, Palmetto Med.,
Dent. & Pharm. Association.

WHEREAS, The Practice of medicine has for its highest goal the purpose of giving to humanity the very best of service for the prevention, healing and the alleviation of diseases as they afflict mankind; and,

WHEREAS, In the course of years, there has occurred through necessities and advances, the concentration of medical skills into categories known as specialties, where the individual's knowledge and skill is centered upon the treatment of certain specific ailments instead of the practice of medicine in general; and,

WHEREAS, Individuals who have prepared themselves for service in special fields are required to have their abilities testified to, by being certified as diplomates of one or more of the duly accepted Boards having jurisdiction therewith; and,

WHEREAS, It is customary in these United States to restrict applicants for Fellowships in the various Colleges to only those who are members in State Medical Associations affiliated with the American Medical Association or similar other national bodies; and,

WHEREAS, We, the Negro physicians of South Carolina, through non-membership in the South Carolina Medical Association, do thereby become automatically barred from the privilege of being so recognized; and,

WHEREAS, It is our desire to freely participate in the fields of specialized medicine under all and similar required attainments and perfections now, are hereafter held as necessary standards by the said Boards and Colleges; and for the freer and fuller opportunity to participate in the distribution of advancing scientific knowledge and skills, as is disseminated through the scientific sessions of the South Carolina Medical Association, that the knowledge and skill so received may be used by us advantageously in the care of the more than three-quarters of a million colored people who reside in our State and rely largely upon our ministrations for their health condition;

Now, therefore, be it resolved, by the Palmetto Medical (Dental and Pharmaceutical) Association of the State of South Carolina, now in annual session;

(°Letter received from Palmetto Medical, Pharmaceutical and Dental Association)

that the duly installed officers be, and they are hereby authorized to formulate and present to the South Carolina Medical Association a request that the privilege of membership therein be opened to Negro physicians licensed to practice medicine in the State of South Carolina, and in good standing on the membership roster of this the Palmetto Medical (Dental and Pharmaceutical) Association.

Respectfully submitted,
Committee on Medical Education and
Hospitalization
T. C. McFall, M. D., Chairman
L. W. Long, M. D.
D. M. Duckett, M. D.

Approved and Adopted this 26th day of April, 1951 by the Palmetto Medical, Dental and Pharmaceutical Association in annual session at Columbia, S. C.

R. W. Mance, M. D., President
Harold Hill, Ph.D., Secretary)

THE CHAIR: Gentlemen you have heard the report of the Chairman of Council, at this time we will take some action on his recommendations.

First—Regarding the Committee to study the request of the Palmetto Medical, Dental and Pharmaceutical Association, to study the entire matter from all angles and to report back with recommendations at the 1952 meeting of the House of Delegates.

(Motion for adoption of the resolution was made by Dr. Kenneth Lynch, seconded by Dr. Bachman S. Smith, Jr., of Charleston, there was no discussion, a vote was taken and the motion was unanimously passed.)

Second—(Recommendation of Council) That a special committee on Constitution and By-Laws be appointed by the President to review and bring up to date the Constitution and By-Laws with an idea of a revised publication, the last one having been made in 1944.

(Motion for adoption of the above recommendation was made by Dr. William Weston, Sr., of Columbia, and seconded by Dr. Kenneth Lynch)

THE CHAIR: This committee will be appointed to report back to the House of Delegates in 1952.

(The vote was taken and passed and it was so ordered.)

Third—(Recommendation of Council) That the Historical Commission be permanently continued to preserve and record such historical information as would best serve, and preserve the records of this association.

(Motion for adoption of the recommendation was made by Dr. Hugh Smith, seconded by Dr. Carl A. West, a vote was taken and unanimously passed.)

Fourth—The next was in regards to a Grievance Committee and the Council suggested that Dr. Roderick Macdonald have the privilege of presenting his plan this afternoon. Council approved the plan and recommends it to this body.

(Dr. Macdonald was called on by The Chair to come forward and present his plan.)

REPORT OF THE COMMITTEE ON ADVISABILITY OF A GRIEVANCE COMMITTEE

The Committee appointed last year to investigate the advisability of instituting a Committee of the Association to serve in the capacity of a Grievance Committee, submits herewith the following report:

The Committee has studied carefully the structure, organization, duties and authority of the Committees appointed for a similar purpose by other Medical Associations throughout the country and has reached the conclusion that these Committees serve a very useful and salutary purpose. We feel that creation of such a group from our Association would be in the

interest of a better relationship among the members of the profession and with the public at large, and that such a body should be created as a standing committee of the Association, responsible to and under the direction and control of the Council, and that full publicity should be given to the fact of its creation and existence.

Your Committee, therefore, recommends that Council approve in principle the plan for the creation, organization and operation of a Grievance Committee for the South Carolina Medical Association as set forth in the attached and accompanying sheets, that the necessary changes in and applicable provisions of the By-Laws to authorize the creation and operation of such a Committee be submitted, with Council's approval, to the House of Delegates as proposed Amendments, and that the purpose, organization, procedure and rules governing the operation of such Committee be as set forth herein.

Roderick Macdonald, M. D.

N. B. Heyward, M. D.

J. A. Sasser, M. D.

Proposed Amendments to By-Laws:

Amend Chapter VII of the By-Laws by adding a new section to be designated as Section 3, and by numbering the remaining sections of said chapter to conform, the said new Section 3 to read as follows:

Powers of the Council of the South Carolina Medical Association:

"The Council shall exercise the supreme judicial powers of the Association. It shall have supreme charge of all questions of ethics and discipline of members. It shall have and exercise original jurisdiction over and decide finally for this Association all questions of ethics, discipline, or right to membership submitted to it by the Grievance Committee, hereinafter provided for. The Council shall interpret the Constitution and By-Laws of the Association and shall have power to establish and prescribe rules of procedure to govern all cases within its jurisdiction. Matters over which the Judicial Council of the American Medical Association has jurisdiction may be submitted to it for adjudication, but only by way of appeal from the decision of the Council of this Association."

Amend Chapter VIII, Section 1, of the By-Laws by adding at the end of the list of Standing Committees therein contained, a line containing the words "A Grievance Committee."

Amend Chapter VIII, further, by adding a new Section between the present Section 7 and Section 8, to be known as Section 8 and renumbering the remaining Sections of the Chapter to conform, the new Section 8 to read as follows:

"The Grievance Committee shall consist of the five immediate past Presidents of the Association, together with any additions thereto which Council may from time to time determine to be necessary or advisable. The Committee shall investigate and supervise the ethical department of the membership of the Society, make periodic recommendations for improvement of professional conduct, and shall prefer and prosecute charges before the appropriate judicial bodies against any physician deemed by the Committee to be guilty of unprofessional conduct.

No member of the Grievance Committee may participate in deliberations or questions concerning the conduct of a physician residing in the jurisdiction of that Committee member's component society. The Committee shall have power to adopt rules to govern matters within its jurisdiction, and said rules, after approval by the Council, shall be published in the Journal of the Association and shall become binding upon all members of the Society ten days after such publication."

RULES OF THE GRIEVANCE COMMITTEE OF THE SOUTH CAROLINA MEDICAL ASSOCIATION

I. Purpose of the Committee:

- To act as the Association's "grand jury" for investigating complaints and/or initiating investigations concerning professional conduct and ethical department.
- To prepare, for issuance to the entire membership in bulletin form through the executive office, periodic bulletins on ethical department containing definite educational advice to physicians in this regard.
- To initiate and prosecute, just as would a grand jury in civil procedure, charges against any physician deemed by the Committee guilty of unprofessional conduct. These charges shall be preferred in writing and signed by any person, lay or professional, and filed with the Board of Censors of any component Society, direct with the Council of the appropriate district of the State Association, direct with the Council of the State Association, direct with the State Board of Medical Examiners, or direct with any criminal court, according to the nature of the charges. There shall be a limit of one year on any alleged act.
- By way of further definition, it should be understood that the Grievance Committee has no jurisdiction in a judicial way. Just as would a grand jury, it will receive and pass its own judgment upon evidence, but it will not assume authority to discipline any physician. It may at any time express its advice to a member of the Association on any matter pertaining to professional conduct.
- In pursuance of its function as a grand jury within the structure of the Association, the Committee shall have the power and authority to summon members of the Association to appear before it, either in connection with complaints involving the members summoned or as witnesses in cases involving other members. In case any member shall fail to respond to such summons, the Grievance Committee shall cite the member before the Council for contempt proceedings.

II. Standards of Conduct:

The current edition of the "Principles of Medical Ethics of the American Medical Association," as interpreted from time to time by the Council of the South Carolina Medical Association, shall be the final standard by which all professional conduct and ethical department are determined.

III. Organization of the Committee:

The Committee shall annually elect a Chairman, a Vice-Chairman, and a Secretary from among its own members. Under the By-Laws of the Association no member of the Committee may participate in the deliberation on questions concerning the conduct of a physician residing in the jurisdiction of that Committee member's component society. In view of this fact, the Vice-Chairman will preside in all cases involving a member of the Chairman's district, and the Vice-Chairman will serve as Secretary in all cases involving a member of the Secretary's district. Thus, two disinterested officers of the Committee will always assume these functions. Any person against whom an accusation is made will be informed that any member of the Committee residing in his district will not be present during the Committee's deliberation on that case. However, if the accused is willing, the Acting Chairman of the Committee may, on occasion, instruct a Committee member in the accused's district to undertake preliminary investigation, obtain information, and report to the Committee, in order to expedite

proceedings and eliminate unnecessary travel.

IV. Professional and Technical Assistance:

- a. Unless in a given case the Committee determines that verbatim testimony should be taken, no person other than duly qualified members of the Committee and any witnesses then being heard will be admitted to any part of its proceedings when a complaint is being considered.
- b. Should it become necessary in the opinion of the Committee to take verbatim testimony in any case the Committee may employ a competent shorthand reporter who shall be sworn to secrecy. No regular employee of the Association will be requested or permitted to take notes or minutes on such matters.
- c. In the event the Committee reaches the point in any investigation, where the Committee feels it should file and prosecute charges against a physician before any judicial body, the Committee will, before filing such charges, consult with the regularly retained attorney of the State Association to determine the sufficiency of the evidence.

V. General Procedure:

- a. The Committee will receive complaints, either verbally or in writing, from any person, whether or not he or she be a physician, a member of the Association, an employee of the Association, a patient or a physician, or any other person, lay or professional.
- b. The Committee will respect the completely confidential nature of any complaint, provided that any complainant unwilling to appear personally before the Committee will be given to understand that such unwillingness prejudices the possibility of the Committee's being able to make a complete investigation. Every complainant will be invited to appear before the Committee with the assurance that even the fact of his appearance before the Committee, as well as the origin of the complaint, will be kept confidential; provided however, that should any form of prosecution result, the Committee will of necessity reveal the names of prospective witnesses; even though these names may include that of the complainant.
- c. The Secretary of the Committee will acknowledge receipt of all complaints, either verbally or in writing, as the circumstances of each case indicate to be wiser. The Secretary will likewise, in consultation with the Chairman arrange for meetings of the Committee with such frequency as may be necessary so that investigation of each complaint may be carried out with reasonable dispatch, and will notify complainants and any other persons whom the Committee wishes to interview concerning meeting dates and places. The Secretary, will, at all times, keep the Chairman informed concerning the progress of investigation conducted otherwise than at meetings of the Committee.
- d. The Chairman on receipt of information from the Secretary concerning each new complaint, shall determine whether first investigation or action on the complaint should be by the whole Committee at a meeting or by one or more members of the Committee individually. In most cases the Chairman will designate one or two members of the Committee who are not residents of the same district as the physician being complained against, to undertake a preliminary, informal investigation, bearing in mind the confidential nature of such investigations.
- e. When an informal investigation like that referred to next above has convinced at least two members of the Committee (not including a member in whose district the physician under investigation resides) that no disciplinary action is indicated and that both the complainant and the physician involved are willing to accept the advice of the Committee for reconciliation of the complaint, the advice and suggestions of the Committee shall be reduced to writing and supplied to both the complainant and the physician concerned, over the signature of the Chairman.
- f. When an informal investigation like that referred to in "d" above convinces any disinterested member of the Committee that disciplinary action is indicated, the entire Committee, except any member whose district is involved, shall consider the matter informally in meeting before further action is taken, and further action shall be determined by majority vote of those present.
- g. When, after the investigation and attempts to effect amicable settlement, the Committee is unable to reconcile differences over fees charged by a member of the Association, the Committee shall by a majority vote determine the fee which it deems fair and proper. In case the Association member shall agree to the amount so fixed and shall fail to abide by his agreement, the Grievance Committee shall cite such member before the Council for contempt proceedings. Failure to agree to such determination of the Grievance Committee shall constitute grounds for the preferring of charges of unprofessional conduct under the principles of ethics.
- h. Whenever the Committee determines to file charges against a member of the Association with either a Board of Censors or the Council, the charges shall be reduced to writing and filed over the signature of two officers of the Committee and over the typed signatures of all other members of the Committee who have taken part in the proceedings. In the event that, in consideration of a case involving complaint against a physician who is not a member of the Medical Association, it is determined that disciplinary charges should be filed against the doctor with a Board of Censors or the Council, were he a member of the Association, but it is also determined that the evidence does not justify proceedings before the State Board of Medical Examiners or a criminal court, the Committee shall reduce its findings to writing, and subject to advice of legal counsel, shall notify the physician concerned of its findings and shall file a copy of this notice with the Secretary of the State Association, and with the Secretary of the State Board of Medical Examiners for future reference.
- i. Both the original complainant and the physician against whom the complaint has been made will be furnished with a written statement and explanation of the final decision of the Committee as soon as possible after the Committee has completed its investigation of the case, whether (1) the Committee considers the case closed or (2) decides to file charges with a judicial body.
- j. Immediately after each meeting of the whole Committee, the officers of the Committee shall prepare and deliver to the Secretary of the South Carolina Medical Association, a memorandum suitable for inclusion in the Journal of the South Carolina Medical Association, concerning any non-secret actions taken or general advice arrived at concerning the status of ethical deportment within the Association. In the event

it is desired that such material be made the subject of a special bulletin to the entire membership, the Committee shall make this decision known to the Secretary of the South Carolina Medical Association.

- k. Whenever the Committee determines that contemplated actions of the Committee, other than bulletin services indicated next above, will require us of shorthand, telegraph or long distance telephone service, living or travel expenses, or other matters involving State Association finances aside from routine services of the Secretary, the Committee will notify the Council of the Association through the Secretary, and estimate the financial requirements of the action then contemplated.
- l. Officers of the Grievance Committee shall keep appropriate and sufficient record of all of its final actions, other than confidential matters, and shall prepare quarterly reports of progress to the Council and an annual report and recommendations to the House of Delegates.
- m. The Grievance Committee shall hold meetings as often as necessary, and at a place most convenient for the members.
- n. The establishment of a Grievance Committee shall be given full publicity so that the people of the State may be made aware of its existence and its functions.

THE CHAIR: You have heard the report of Dr. Macdonald, what is your pleasure?

Dr. Hugh Smith: I move we adopt this report.

Dr. Wm. H. Folk, Spartanburg: I move that we accept this report as a matter purely of information, both as to its order and to its objects and that we postpone this matter until every doctor in the State has had an opportunity to study this. (This motion was seconded by Dr. Sanders.)

THE CHAIR: Is there any further discussion?

(The question was asked from the floor, "further discussion of what motion, sir?")

DR. FOLK: The motion is that we receive the report as a matter of information and that it be publicized to the profession and that we determine its value and pass on it at our next meeting in 1952.

Dr. D. O. Winter: I would like to add to that motion, if Dr. Folk will accept it, that the whole article as written be published in our State Journal so everyone in the state society can see what this is about and if possible give us some idea as to the reason for this prescription. This is a big prescription and we don't know what it is for. Therefore, give us a chance to find out why it is done.

(The above amendment was accepted by Dr. Folk)

THE CHAIR: Is there any further discussion? If not, we will put the question. All those in favor of Dr. Folk's motion signify by saying "aye." (There were a number of "ayes" and also some "noes," when "noes" were called for.)

DR WILLIAM WESTON: May I suggest that you definitely announce just what we are called upon to vote on, there seems to be confusion.

THE CHAIR: We are called upon to vote on Dr. Folk's motion "That we receive the report as a matter of information and that it be publicized to the profession and that we determine its value and pass on it at our next meeting in 1952."

THE CHAIR: All those in favor of the motion signify by standing. (33 stood) All those opposed,

stand. (Dr. Heyward counted (20) standing, the stenographer counted a few more)

THE CHAIR: There were thirty-three in favor of Dr. Folk's motion, twenty some odd opposed. The motion is carried.

(Dr. Mayer, continuing to present recommendations of Council)

Fifth: Council recommends that the President appoint a committee to work in cooperation with a similar committee from the Academy of General Practice towards establishing a state owned and operated hospital for the treatment and rehabilitation of alcoholics.

(Motion made by Dr. Sanders to adopt this recommendation, and Dr. Richard W. Hanckel, Jr., seconded the motion. Dr. Kenneth Lynch asked if this was a recommendation merely to study the situation, and the answer was in the affirmative. There was no discussion; the vote was taken and there was only one dissenting vote. The motion carried.)

Sixth: (Dr. Mayer reading) "Two representatives of the Association of American Physicians and Surgeons appeared before Council at the request of Dr. T. G. Goldsmith. After hearing their aims and purposes, Council agreed that these gentlemen should be given an opportunity to present the matter to this House of Delegates, Council believes that from 15 to 30 minutes will be necessary.

THE CHAIR: We will take that up under NEW BUSINESS and hear these gentlemen a little later on.

Seventh: (Dr. Mayer reading) "In accordance with the By-Laws of the S. C. Medical Care Plan, Council nominates the following to fill vacancies in the Board of Directors of the Plan: Dr. J. Howard Stokes and Dr. C. R. F. Baker, to succeed themselves; Dr. T. G. Goldsmith to replace Dr. W. T. Barron, resigned; Mr. Waddy Thomson, Jr. for Mr. W. C. Edwards, resigned; and Mr. T. R. Gilhooly for Mr. Earle Britton.

(Dr. Winter moved for the election of the named nominees; this motion was seconded by Drs. Wyatt and Adcock.)

THE CHAIR: It has been moved and seconded that these names that have been suggested by Council be duly elected. (A vote was taken and the motion was unanimously carried.)

Eighth: (Dr. Mayer) Council requests this House of Delegates to approve the proposal to donate \$5,000 to the American Medical Association Educational Fund.

DR. HUGH SMITH: I move we adopt this plan and I would like to speak briefly towards it.

(Dr. Wilson seconded Dr. Smith's Motion) I consider this an important step to this association and have incorporated a paragraph in my report as Delegate to A.M.A.

Last December the Board of Trustees made a momentous announcement when they organized the American Medical Educational Foundation and gave it \$500,000.00. Shortly after its announcement the California State Association gave \$100,000.00. Many other organizations and corporations are contributing to this Fund. The moneys are to be given outright—with no strings attached—to medical colleges in financial need—that applies to most of them, unfortunately. It is hoped that a large number of members of A.M.A. will give \$100 dollars or less as they can afford annually to this Foundation. As you know the cost of medical education is enormous and the fees collected by the Medical College pay only a small part of the cost per student. Perhaps this association can contribute at this meeting some part of its capital funds to the American Medical Education Foundation. I recommend such action to this House of Delegates."

DR. BUCK FRESSLY: The only excuse I have of appearing on this subject is that doubtless you don't know, and you have no right to know, that for the last two years I have served on the Council of Medical Education for the A.M.A. I was dropped in there with a lot of educators, most of them being from schools over the country, some of the biggest men in the country, and for the last two years we have had numerous meetings on the question of aid for medical education. In fact, the Council for Medical Education to Hospitals—this has been foremost in their thinking for the past two years and a forward step was taken in interim meeting of A.M.A. when the A.M.A. donated \$500,000 for this fund, that is the A.M.A. Fund for Medical Education. As you know, this is a national fund. The thing we are concerned with is the American Medical Association Foundation for Medical Education. California threw in \$100,000 and various individuals have sent in checks for this Foundation. I think it is one of the most forward steps that the S. C. Medical Association can take in giving this \$5,000 to the Foundation for Medical Education of the A.M.A.

As you know, this fund can be earmarked for any college that you wish. Of course, we of South Carolina are directly interested in our own State Medical College and if, in addition to the \$5,000 donated by the S. C. Medical Association, the individual doctors will come forward with their subscriptions we can very much take the pressure off of our own medical college, because I think that practically all of the donations, practically all of them, will be earmarked for our own College.

This will not relieve construction costs, but operating costs, it will take the heat off Kenneth Lynch and the Board of Trustees of our college.

I think this separate donation will have to be brought down to a county level to bring to each county society our tremendous responsibility in responding to this Fund. I had the feeling and I have talked to some people during the two days here, that I was rather optimistic, I felt there would be three or four hundred members of the S. C. Medical Association who would send in their check for \$100 for this fund. It was not \$100 given away with part to go to Harvard, or Yale, but it is to be spent in our own state and in our own medical college,—some of the men I talked to raised their eyes right high when I suggested two or three hundred, they were surprised. This is a matter of business. I have attended two or three meetings with the Council, with the Federal Security Commission, with Mr. Oscar Ewing. The one thing the Federal Security agent wants most of all is the direction of medical education and once they have control of that—good bye. It is a cheap price for all of us to throw \$100 in this. You have seen in the Journal since December a notice of this fund with the blanks and how to make out your checks. They suggested \$100, if anybody wants to give \$500, all right. If they want to give \$50.00, all right. I think it is urgent that we do respond to this call and that we respond to it as heavily as we can. I think it represents our freedom in the practice of medicine.

I have talked to maybe 25 or more doctors in here and they said "I have expected to send in \$25 or \$100. I didn't get around to it, or I didn't think about it." I have a report as of yesterday and as of today only two checks for \$100 has reached the A.M.A. Foundation. I was sort of ashamed of that but I am not ashamed of it because this thing has not been brought to the attention of the medical profession as a whole. I am deeply interested in it. I hope various members of this House of Delegates will get up and discuss it because I think it a thing of foremost importance before this House of Delegates. I congratulate the Coun-

cil in this donation of \$5,000 and trust that many more subscriptions will be going forward soon.

DR. WILLIAM WESTON: Mr. President, Members of the House of Delegates. I have been a member of this association many years and I do not believe there has come before this House a matter of even comparable importance as this is today. I think it is not only an opportunity but it is a challenge. You perfectly well know that the medical profession, and their aims and intentions and purposes are grossly misunderstood and not only by people who we usually think of as uninformed but by people who are usually well-informed. We have the greatest respect, I am sure for the Governor of South Carolina but it is perfectly evident from certain statements that he has made that he is misinformed.

Now, as to the justice of this matter, I think not only does this situation need clarification and explanation but it gives us an opportunity to show our loyalty to the profession and particularly at this time to the Medical College of the State of South Carolina. Those of us who are familiar with its history know of the great difficulties that it has operated. We know of the sacrifices that have been made by the members of the faculty over many years and we ought to reward the tremendous effort of the Board of Trustees and Dr. Wilson and Dr. Lynch for the magnificent work that they have done.

Now, as a matter of fact,—is the Medical College of the State of South Carolina all that we would like it to be? I think there are deficiencies which this perhaps gives us the opportunity of helping to supply. That is one opportunity. Another is that our freedom, our very integrity is at stake. We are represented by certain parties as being a selfish, mean, crowd of people. We know that isn't true. We also know that from high quarters, an enormous amount of money has been spent for propaganda purposes that has gone to deliberately misrepresenting us.

Now, the only fault I have to find with this report is that it is only half as much as we could afford and should give. Now, can you think of any better purpose than to make our position clear. Do you know of anything that we can do that will so impress the position of the medical profession of this State as to generously comply with these requests. I believe that there are many of us who are going to answer the request of the American Medical Association in donating to this Education foundation, and we have, as Dr. Pressly has explained to you, we can designate what source this fund goes to, and so far as I can see it, we can no better supply this demand and meet this request than by doing the very best that we can do, even though it means sacrifice.

DR. T. G. GOLDSMITH: Gentlemen, I would like to say just one or two words in favor of this association donating this \$5,000 to this cause. As all of you know there are several bills in Congress and one of them particularly to provide Federal Aid to Medical schools and to establish Federal schools operated by the Federal Government. The Supreme Court ruled that any money that the Federal Government donates or subsidizes to anyone, they will control it. And this is one of the ways that we have of keeping the Federal Government out of our medical schools. It is very broad in its implication they have in mind, Oscar Ewing and the socialists in Washington have in mind controlling the future medical students of the United States and if they get control of the future medical students they will have a bunch already in socialized medicine. Let's everyone support this.

DR. KENNETH LYNCH: Members of the House of Delegates, this, of course, is a great temptation to launch into use of your time which would not be justified, but I hope that I might have an occasion

tomorrow at the Alumni luncheon to make a brief concise and I think an eye-opening report concerning your own medical school which relates to this very subject.

This is, of course, in the minds of all of us a worthy, a meritorious cause of its own right, but to go further than that and make use of it, to better our circumstances, as Dr. Weston and Dr. Goldsmith called attention to, is a very practical thing to do. There are, however, certain circumstances to which I would direct your attention, not in begging for funds for the Medical College, I am not here for that purpose, although this action, if taken, would be beneficial. There has not yet been a disclosure of the procedure for distributing any fund that may come about by this movement. You are given the opportunity of designating what school, if you chose to designate a school, may be assisted by the money that you contribute, either as an organization or an individual, but unless you do so designate it will be distributed by an organization in which you will have a very indirect voice, if any.

It is my belief that the distribution of this fund will probably not even be made directly by the foundation set up by the American Medical Association, but through another. Therefore, the very practical plan, if you so desire, would be to designate the school that you want to help with your money and not delegate the distribution of that money to somebody else who may not have your school in mind.

I would like to call your attention to this very practical system regarding it and incidentally—if I caught the Council's recommendation correctly the contribution of this Association was not designated to any special school,—but I would like to call your attention to this very practical point, also—last year 40 of the 70 odd medical schools in this country operated with deficits, some of them with deficits larger than the total budget of the Medical College of the State of South Carolina. The objective in this fund, as announced, \$5,000,000 would not cover that deficit for one year. The Medical College of the State of South Carolina does not operate on a deficit. It operates on what it has. If, for instance, as a practical matter the distribution of this fund should be to correct deficits, unless you designate the school to which your money will go, and unless it shall have a deficit to cover, it would receive nothing.

As I say, I know nothing about it, it has not even been discussed or announced anywhere, the method of distribution of this fund, worthy as the whole cause may be, and I hope that it is a beginning of a movement which will grow to such an extent as to remove the type of threat of which you have been reminded here.

There is one other point, it seems to me a very practical application of this discussion, Dr. Weston referred to it, the medical profession is charged with deliberately influencing medical schools in the restrictions of their enrollments, for the purpose of restricting or limiting the number of doctors to compete with those already in practice. As Dr. Weston says, we know that that is not true, but it is a very prevalent charge and I would suggest, and I am going to make no motion here, I am going to make no recommendation whatsoever, except to call your attention to these very practical circumstances. I would suggest that if you are going to give money to medical education to relieve its condition of deficit in general in some schools in particular, if you are going to do that—why not make it in a form which will be most useful to you and to remove or deny charges made against the profession and against the medical schools? I suggest that you seriously consider specifying whatever money you may give as an organization or an individual to

the school that you would like to help, in the first place, and that it be designated for the provision of facilities for the increase of enrollment, removing the charge on the part of anybody that you are trying to limit the number of doctors.

DR. J. R. YOUNG, Anderson: I think every doctor has it in his mind at some time that he owes something to his profession, that he would like in some way to pay. I don't know any happier way that we, as a group, could make a payment to what we owe our profession than this. The money you heard referred to consists of a surplus. We know we are not in the habit of paying or receiving dividends from the State Association, it is down there. What happier way of spending that money than for this plan in the interest of the medical profession. I think we can show ourselves, and we can show the younger men who are now studying medicine that there is a medical profession "esprit de corps," a sense of fraternity, and I think the reflex benefits that we may expect from this thing are worth considering.

DR. W. Thomas BROCKMAN: I don't want to reiterate anything, I want to add this one word. I think the subject has been well covered but I can see the point that if we doctors don't come down pretty liberal then our real source of income that we are hoping to touch, our industrial friends in all of these progressive communities that we know about will not respond. We are hoping that some of these big industries that are making lots of money will be coming in and helping us and if we don't, as a group and individuals come on down and give our \$100 or whatever we can, I am afraid those fellows will say "Well, we can't help you boys, you don't want to help yourselves." I would want us to keep that in mind as we go along.

THE CHAIR: Is there any further discussion?

DR. WILLIAM WESTON: I would like to make it as a motion that this amount be increased to \$10,000 and that it be given the widest publicity in order that the people of South Carolina may realize that the physicians of this state are not recreant in their duty towards this institution and at the same time by wide publicity call attention to the exacting education that is required to be a physician, the training naturally must be thorough and it must be sustained. Now, I hope that this motion will meet with the approval of this house. I thank you.

THE CHAIR: Is there any further discussion?

Dr. Smith, will you accept the amendment?

DR. HUGH SMITH: I will either accept the amendment or I will withdraw my motion and second Dr. Weston's motion.

(Upon request of the Chair the stenographer read to the House of Delegates the motion as stated by Dr. Weston, as follows:)

I would like to make it as a motion that this amount be increased to \$10,000 and that it be given the widest publicity in order that the people of South Carolina may realize that the physicians of this state are not recreant in their duty towards this institution and at the same time by wide publicity call attention to the exacting education that is required to be a physician, the training naturally must be thorough and it must be sustained.

DR. TOM BROCKMAN: I would like to add an amendment that we designate where that money is going, since we have our own State Medical College.

(Dr. Weston stated he accepted that amendment heartily.)

THE CHAIR: Is there any further discussion?

DR. SASSER: Won't this \$10,000 deplete our treasury too much at one time?

DR. J. HOWARD STOKES (Treasurer): It won't break it but it will bend it badly.

DR. SASSER: I think we had better give \$5,000 and later give another \$5,000 for we will deplete the Treasury and have to call on the members.

DR. WILLIAM WESTON: I wonder if that will fully answer the argument or the statement of the Chief Executive of this State? Wouldn't it be very much more impressive if this sum was \$10,000, because it will not break us to do it. And can we use that money for any better purpose?

DR. HUGH SMITH: Call for the question.

THE CHAIR: You have all heard the motion by Dr. Weston.

DR. BROCKMAN: Suppose we say that it goes to the South Carolina Medical College.

DR. JOHN M. FLEMING, Spartanburg: If Dr. Weston will accept this amendment to his motion I will move we add that this money be specifically used for increase in enrollment in the Medical College of the State of South Carolina.

DR. WM. WESTON: I will accept that.

THE CHAIR: Are you ready for the vote? All those in favor of the motion.

DR. JULIAN PRICE: To make this constitutionally correct, might I ask Dr. Weston to change his motion to read that this House of Delegates request the Council to give this money? The House of Delegates can not vote any funds from the Association, it will have to be done by the Council.

THE CHAIR: Dr. Weston, you accept that—(It was accepted) Dr. William Weston made a motion that the House of Delegates request the Council to give \$10,000 to the American Medical Association Educational Fund, and that this sum be earmarked to go to the South Carolina Medical College, said moneys to be specifically used for increase in enrollment in the Medical College of the State of South Carolina; and that the gift be given the widest publicity in order that the people of South Carolina may realize that the physicians of this state are not recreant in their duty towards this institution and at the same time that wide publicity call attention to the exacting education and thorough sustained training that is required to be a physician.

THE CHAIR: Are you ready for the question? (A vote was taken on Dr. Weston's motion and was carried with only one dissenting vote.

(Dr. Mayer continuing with recommendation from Council)

Ninth: (Reading) Council recommends to the House of Delegates the formation of a standing committee composed of the Editor, Vice-President, and Secretary to give daily news releases, through its public relations officer, to the daily press of such happenings of the annual state meeting as seem appropriate. Our scientific and political interest would be guarded by such committees. The public wants the news, the association needs the public relations. This custom is followed by many of the leading associations.

(Motion made by Dr. Robert Wilson to adopt this recommendation; seconded by Dr. R. W. Hanckel, Jr.; there was no discussion, the vote was taken and unanimously passed.)

THE CHAIR: I will appoint Dr. D. F. Adcock, Dr. W. R. Wallace and Dr. Wells Brabham as the Reference Committee.

THE CHAIR: At this time we will hear from our President-Elect, Dr. J. Decherd Guess, who has some views to bring to you, Dr. Guess.

DR. J. DECHERD GUESS (President-Elect): First, I will apologize for asking for time on this

very full agenda. Perhaps this will set a custom that will continue in the future whereby the president-elect will be given an opportunity to express some thoughts that may have accumulated in his brain during his year of training for the position of your president. If you will recall last year when the President, Roderick Macdonald sang his swan song he made certain recommendations and they died as they fell from his lips because they were given at the close of his term of office.

During the past year I have had occasion to think much of the business of the House of Delegates and how that business is transacted. I have had an opportunity to hear complaints from many members of our state association about the authority that has been acquired by the Council. That was referred to in the report of the Secretary this morning. I think you will all agree that the progressive things, the progressive movements that have been made by this Association during the last number of years have had their initiation in the Council and there is a very good reason, I think for that, and that is that the agenda of the House of Delegates has from year to year grown more and more crowded so that there is hardly an opportunity during the deliberations of the House to think of our problems or to thoughtfully and seriously discuss things that might be of a progressive nature. Many of the ideas that have come to me during the past year have already been incorporated in the report of Council this morning and have been adopted by you. I will not refer to them further.

Your Treasurer reported the fact that in collecting Sixty Thousand (\$60,000) Dollars and expending slightly less than that that we are in big business. We are in big business and a part of that business is the business of attending to our affairs by this House. I have been very much disturbed for a number of years of how that business has been attended to in the deliberations of the House of Delegates.

You have provided for a Committee on Constitution and By-Laws. I hope that Committee, when it is appointed will give consideration, time and thought to the method of the conduct of business by this House and I hope that they will compare our method of doing business with that which is employed by most of the large legislative bodies, the way of doing business by way of reference to committees,—Committees who are not appointed a few moments before they are to receive matter referred to them and to report a short time later—but Committees who will have to study the problem, the recommendations and the resolutions and have hearings at which hearings every member of the State Association (not only the delegates) will be invited to express themselves. I hope that Committee on Constitution and By-Laws will give some thought and attention to that.

It appears to me that it should be possible to have not one meeting, not one session, of the annual meeting of the House of Delegates but two with a recess in between times and during that recess give an opportunity to the men to familiarize themselves through reference committees with the matters that have been proposed. I believe that had we had that set-up today that this important matter that Dr. Roderick Macdonald's committee has worked on so long and hard, which was a brand new concept to many of us, and with the fact that you recognize it as a very new concept you demanded more time to think it over, to find out something about it. I don't think that was an unwise thing, but if we had had two sessions of the House of Delegates, if that had been referred to a reference committee this afternoon, where each of you who were interested could find out more about it, it could possibly be settled at a second meeting of the House of Delegates.

I think the matter of the conduct of our business is particularly important. And because of the fact that next year, just as this year, we are going to have many important matters to come up, matters on which we should deliberate at some length, and matters on which each of you should have an opportunity to express yourselves, if you so desire, I am going to take the liberty of recommending that you authorize your officers of your association to change the time set-up, the schedule of our annual meeting in this wise: that next year the House of Delegates convene on Tuesday morning; that it recess on Tuesday afternoon (not adjourn); that it reconvene on Wednesday morning, and that it adjourn at 1:00 P. M. on Wednesday afternoon; and that the scientific program, instead of beginning on Wednesday morning begin on Wednesday afternoon and continue through Thursday afternoon. Understand, not "until" Thursday afternoon but "through" Thursday afternoon and that the annual banquet be the concluding, the Grand Finale, of our meeting and that it be held on Thursday night. I think if that program is put in effect it will accomplish several things, it will give more time for the deliberation and transaction of our business; it will tend to hold our group together for the Thursday program; and we will all be in position to enjoy the festivities and the fellowship of the banquet to a greater extent if we know we will get a nice sleep that night, before leaving for our homes the next morning.

I thank you for giving me an opportunity to present these views to the House.

THE CHAIR: You have heard the suggestions of our President-Elect, what is the pleasure of this House?

DR. GOLDSMITH: I make a motion that it be acted upon this afternoon under new business.

(This motion was seconded by Dr. Lattimore.

(House of Delegates recessed One Hour — for Luncheon)

2:00 P. M.—Continuation of House of Delegates Meeting.

SOUTH CAROLINA MEDICAL CARE PLAN

ANNUAL REPORT

April 1, 1950 — March 31, 1951

DR. J. D. GUESS, M. D., Chairman
Board of Directors

South Carolina's Blue Shield Plan, sponsored by the South Carolina Medical Association, officially began operations on April 1, 1950 when the first subscribers were enrolled. Membership on that date was 1,986 persons; twelve months later, enrollment had increased to 19,323 persons, enrolled through 445 groups. Of the total membership, 7,114 are employed subscribers and 12,209 are dependents, or a membership of 2.7 persons per contract. As a basis for comparison it might be pointed out that Blue Cross in its four years of operation has enrolled 123,636 persons or roughly $6\frac{1}{2}$ times Blue Shield enrollment. At the time Blue Shield began, it held signed contracts from 724 Participating Physicians; this number has now increased to 816 and there have been only two withdrawals of physicians from the Plan.

For the first five months of 1950, Blue Shield had a working agreement with Blue Cross whereby the latter undertook to do all organizational work, with Blue Shield paying only those expenses directly incurred by it. On June 1, 1950 at the recommendation of the Joint Operations Committee, a formal contract between the two Plans was signed. This contract calls

for Blue Cross to handle enrollment, billing, collecting, actuarial and statistical procedures as well as payment of claims, except those that must be referred to the Professional Service Committee for setting of fees. In return for these services, Blue Shield pays to Blue Cross 25% of its earned income to cover operating expenses. This figure may be revised upwards or downwards at quarterly intervals, upon the recommendation of the Joint Operations Committee. The same Executive Director serves both Plans and all Blue Cross employees are, in effect, employees of Blue Shield. Checks on the General Fund Account may be signed only by officers of the Blue Shield Plan who are bonded in an adequate amount. Checks on the Physicians' Claims Account which is periodically reimbursed from the General Funds are signed by authorized employees who are similarly bonded.

In its first year of operation, Blue Shield has earned \$106,206.45 in income from subscribers. Of this amount, \$41,130.50 or 38.7% has been paid to physicians in settlement of claims. An additional \$31,303.76 or 29.4% has been spent directly by the Plan or paid to Blue Cross under the terms of its contract. Of the balance, \$8,500.00 or 8.0% has been set up as a Reserve against claims referred to the Professional Committee and the remainder of \$25,272.19 or 23.9% is carried as an Unallocated Reserve. It appears, therefore, that the Plan is in a sound financial position, but it should be pointed out that the claim ratio is bound to increase in the future inasmuch as no maternity cases were covered during the first 10 months of operations and tonsillectomies, hemorrhoidectomies and herniorrhaphies have been covered for only the last six months.

As of March 31, 1951, the Blue Shield Plan has paid 949 claims totalling \$41,130.50. Of these claims, 748 or 78.8% were for services rendered in a hospital, while 201 cases or 21.2% were treated in the physician's office. The fact that more than one-fifth of all cases did not require hospitalization should answer the complaint among many general practitioners that Blue Shield is designed solely to help the surgeon and the specialist. Since our Plan is a combination of service benefits and cash indemnities based on the patient's income level, it should be pointed out that in 533 or 56.1% of all cases, the patient's annual income was less than \$3,500, thus entitling him to full benefits. Only 173 or 18.2% were reported as having incomes in excess of \$3,500. However, in 243 cases or 25.7% the participating physician did not report on the patient's income or stated that he did not know. The fact that a majority of claims were paid to those below the income limit seems to indicate that Blue Shield is reaching people that it was organized to help.

The following is a tabulation of claims for the first year, indicating the various types of service and their frequency of utilization:

General Surgery	220	21.8%
Miscellaneous Surgery	148	14.6%
Gynecology	146	14.4%
Ear, Nose and Throat	124	12.3%
Urology	119	11.7%
Orthopedics	87	8.5%
Obstetrics	58	5.7%
Dermatological Surgery	45	4.5%
Eye	25	2.4%
Emergency X-Rays	23	2.3%
Neurosurgery	18	1.8%

It is hoped that the Plan will soon be in a position to expand its benefits, such as the inclusion of in-hospital medical services or the payment of a fee for professionally-administered anesthesia. However, it should be stressed that our Plan is still young, not fully tried and it has not yet begun to experience full utilization.

Under the circumstances, extreme caution must be exercised before any extension of coverage is made, lest we find ourselves suddenly offering too much in the way of service for too little in premium income.

J. Decherd Guess, Chairman
Board of Directors
Allen D. Howland
Executive Director

REPORT OF COMMITTEE ON HOSPITAL SERVICE

DR. ROBERT WILSON, JR., M. D., Chairman

During the past year the South Carolina Hospital Service Plan has encountered very serious difficulties. For the calendar year 1949 there was a surplus of \$14,295.19 or 2.3% of the total income. Compared with this, in the year 1950 there was a deficit of \$87,580.48 or 7.9% of a total earned income of \$1,105,811.19. In addition to this there was a gain in membership of only 5,930, in the last six months. At the end of the year there were 51,529 contracts in force covering 138,093 subscribers, and during January and February 1951 there was a further net loss in enrollment with a drop of about 12,000 subscribers.

The reasons for this change in the situation of the Blue Cross Plan are economic and inflationary. With the rising cost of material and services and the steep rise in hospital costs the plan has not been able to reimburse the hospital to the extent of the services rendered. Because of this at least one hospital has cancelled its contract as a member hospital and several others have given notice of doing so.

In order to meet these needs and correct the situation, a rather sharp increase had to be made in the premium rates. It is obviously impossible to pay mounting costs of service at the ridiculously low rates which were previously in force, and it is hoped that the new schedule of premiums will be sufficient to cover the increased needs.

In the final analysis the success or failure of the hospital service plan will rest with the physicians. Blue Cross does not offer hospitalization for diagnostic purposes and when patients are admitted to hospitals for such service the Plan cannot and should not be expected to reimburse the hospital. Many such cases, admitted to a hospital for diagnosis, have been certified by the attending physicians as having been admitted for treatment, and unless such practice comes to an end it is obviously impossible for the Blue Cross Plan to remain solvent. Such services should be obtainable but obviously the premiums charged would have to be very high in order to meet the expense of diagnostic procedures. In the long run, the success or the failure of the Plan will depend directly on the honesty of the physician.

REPORT OF THE EXECUTIVE COMMITTEE OF THE STATE BOARD OF HEALTH

DR. W. R. WALLACE, M. D., Chairman

The State of South Carolina is becoming highly industrialized. Each new industry, along with its financial benefits, brings added public health hazards. This is particularly true when it is of the magnitude of the Atomic Energy Project on the Savannah River, mostly in Aiken and Barnwell counties.

The A. E. C. estimates that at the peak of construction, there will be employed approximately 35,000 workers. It is believed that about 60%, or 21,000 of these will be accompanied by their families. On a basis of 3.7 persons per family, this results in a total population of 77,700 persons. 40% of 35,000 who will not be accompanied by their families will add 14,000.

To these figures must be added several thousand "service people," making a total of 144,000 people in this area. It is estimated that 55% or 80,000 of this population will reside in South Carolina.

Among other large industrial developments, completed or in the process of completion, can be mentioned, the Celanese Plant of Rock Hill, the Grace Bleachery near Lancaster, the Dupont Plant at Camden, J. P. Stevens Co. at Cheraw, and the Clark's Hill Power Development. Scores of others of varying sizes over the state add many new problems.

Most industrial plants draw heavily on the local water supply and some plants can only operate near a stream of considerable size. Always in a greater or less degree, a large amount of waste material is allowed to go back into the streams. This presents problems to the health officer, the industrialist, the farmer, those interested in wild life and many others.

The Water Pollution Commission composed of members from many fields of work and of which the State Health Officer is chairman, according to the Act, attempts to face these problems and to assist as far as possible in solving them. The Federal Government is expecting all health agencies and allied commissions to work diligently to hold health hazards in the Atomic Area to a minimum.

A large influx of people is always attracted to a new development and many live in trailers which are parked in the vicinity of the development, producing a particularly dangerous health hazard. In order to meet this situation, the Executive Committee has promulgated some rather strict regulations governing these trailer groups. There must be adequate facilities for garbage and sewerage disposal. A supply of safe water must be available. Electric connections must be safe and convenient. Many other regulations must be made not only for the safety of those living in trailers, but also for permanent residents in the vicinity.

The milk ordinances have been improved and enlarged. South Carolina is making rapid strides in dairying. A large amount of milk is shipped out of the state and a great deal is shipped into the state. For mutual protection, adjoining states cooperate by frequent inspection, high standards in hauling and processing milk.

Also, rules and regulations have been adopted this year governing the sanitation of poultry processing plants. Shell-fish and oyster plants, and bottling plants are under strict regulations so as to protect the health of the public.

A large scale effort is being made to eradicate, or at least markedly reduce, rabies in the state. The services of an experienced veterinarian, who has had many years in the U. S. Army have been secured and in addition to other duties, is directing this campaign. Inoculation clinics for administering anti-rabic treatment to dogs have been arranged on a state-wide basis and it is hoped to inoculate at least 75% of the dogs of the state. If this can be done, it will constitute a great back log of immunity in the canine population and will decrease the great number of people who are forced to take anti-rabic treatment each year.

It is our belief that by the veterinarian of the state being reorganized as a group, and through this method of having one of their number in the Division of Communicable Diseases with proper office quarters, much good will be accomplished.

The training program for midwives in the state has attracted national attention and Life Magazine has asked permission to observe all phases of the work

(con't. on p. 288)

The Journal of the South Carolina Medical Association

EDITOR: Julian P. Price

Florence, S. C.

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8½ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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AUGUST, 1951

HOUSE OF DELEGATES

The official body of our Association is the House of Delegates, and as such its official activities and actions should be of keen interest to every member. We would urge careful perusal of the minutes of the last annual session which appear in this issue of the Journal.

The House of Delegates is a democratic body—composed of one or more delegates from each component county society—and as such is beset with the twofold task of allowing each one present the privilege of participating in its deliberations while at the same time attempting to transact a large amount of business in a rather short period of time. That the work of the House of Delegates needs to be stream-lined is obvious to any who has attended its meetings.

Our president, Dr. J. D. Guess, has made specific suggestions concerning the further modus operandi of the organization. These should be given careful consideration, and full discussion should be held in county societies concerning the proposed changes. It is our hope that sufficient progress will be made with our planning so that the 1952 session of the House of Delegates will mark a new milestone in our history.

CONSTITUTION AND BY-LAWS

The House of Delegates, at its last session, instructed the President to appoint a committee on Constitution and By-Laws. It is the duty of this committee to rewrite the Constitution and By-Laws, incorporating all of the amendments which have been added since the last printing, making such changes as may be deemed advisable,—and to present this to the 1952 session of the House of Delegates for action.

The committee has been appointed—Julian P. Price, Chairman, N. B. Heyward, O. B. Mayer, J. D. Guess (ex officio), M. L. Meadors (Legal Counsel).

Those who have suggestions to make concerning changes in the Constitution and By-Laws are urged to submit them to one of the members of the committee as soon as possible.

MINUTES OF COUNCIL MEETING

Sunday P. M., June 3, 1951

The Meeting was called to order at the Columbia Hotel by the Chairman, Dr. O. B. Mayer, at 3:10 p. m. Those present were Drs. Guess, Cain, Stokes, Price, McCants, L. Smith, Sease, Chapman, Mayer, Wyatt, Gressette, Bozard, Heyward, and Mr. Meadors.

Minutes of the previous meeting were read and adopted with corrections. There was no new business.

The budgets of the various officers were discussed. The President and Vice-President had no budget. The Secretary's budget was \$2,000.00. The Treasurer's expenses were included in those of the Business Manager. The Editor's budget was \$2,100.00 plus the

printing of The Journal. The Business Manager's budget will be furnished later. All these budgets making a total of \$21,605.00. The Woman's Auxiliary was granted 50¢ per member for its usual expenses. Dr. Price moved, seconded by Dr. Wyatt, that \$100.00 a year be granted the Historical Commission. The expenses of the Secretary and the two Delegates to the American Medical Association Convention in Atlantic City, were approved. It was moved by Dr. Cain, seconded by Dr. Stokes, that they be allowed railroad and pullman fare and \$15.00 a day for days out of the State. It was moved by Dr. Price, seconded by Dr. Chapman, that the mileage for traveling expenses, in the State, for the Secretary and the Business Manager, be increased to 7¢ per mile.

It was decided that a special meeting will be called if the American Medical Association will not accept the \$10,000.00 contribution to the Educational Fund under the conditions specified by the House of Delegates of the South Carolina Medical Association, at the annual meeting at Myrtle Beach.

It was moved by Dr. Guess, seconded by Dr. Chapman, that changes be made in the manner of handling money of the Association, whereby the Business Manager along with the Treasurer, be responsible and that the officers handling the money be bonded in the sum of \$20,000.00.

A copy of the budget of the combined offices is to be furnished by the Treasurer and the Business Manager to the Secretary, to be embodied in the minutes.

BUDGET FOR SOUTH CAROLINA MEDICAL ASSOCIATION, 1951

President	no budget
Vice-President	no budget
Treasurer	included with Business Manager
Secretary	Office help (\$1200 and \$300) Office expenses (supplies, Tel. & Tel. travel) \$500 \$2,000.00
Editor	Salary (\$1200), Office help (\$600) office expenses (\$300), plus publication of The Journal \$2,100.00
Business Manager	Salary (\$7200), Office help (\$5500), Travel (\$1500), Rent (\$600), Office Supplies (\$750), Tel. & Tel. (\$500), Heat, Light, Water (\$150), Pub. Rel. Conf. (\$500), Bond premium (\$155) \$16,855.00
Woman's Auxiliary	50¢ per member estimated at 550.00
Historical Commission	100.00
	<hr/> \$21,605.00

Dr. Guess then discussed the changes contemplated in the annual meeting.

Dr. Chapman discussed at length the complaints which he received about the management of the affairs of the Association. He suggested that some sort of committee be set up to hear these complaints and handle them. He did not ask any formal action but

wished that the members of Council would keep this matter in mind.

Meeting was adjourned at 5:00 p. m. to be called together again at the discretion of the Chairman.

Respectfully submitted,

N. B. Heyward, M. D.

Secretary

HOUSE OF DELEGATES (Con't. from p. 286)

and to take pictures in order to prepare a feature article by one of the staff reporters.

About the first of this year, the Executive Committee appointed a committee of five of its members to study the various activities of the State Board of Health with a view of consolidating and coordinating such activities as possible for economy and efficiency. This committee spent several days in the central office in Columbia. The State Health Officer had each director of a Division to present in writing the functions and activities of his particular department and a list of the personnel with their duties. The Directors were interviewed separately, and while it consumed considerable time, I think much valuable information was obtained and was mutually beneficial.

As a result of this study and report, a few changes have been adopted which I will attempt to explain from these charts.

The supply bill, passed by the recent legislature, decreased a few items in the budget of the State Board but did increase others, so it seems that the public health activities will continue in a fairly efficient manner. A 20% increase in salaries of all state employees, not to exceed \$600.00 to any one employee, was passed by both branches of legislature and was approved by the Governor. This will be particularly helpful to those in the lower salary brackets and will enable us to retain a number of the trained personnel who are being lured to other states because of larger salaries. I find that legislature will nearly always supply the necessary funds if the needs and the justification of the expenses are shown.

The U. S. Public Health Service funds, which were reduced by \$131,400.00, are assigned on the basis of 60.33 per cent for Local Health Services and 39.67 per cent for Central Administration. The salaries of V. D. Investigators, who function on a county basis, are paid from Central Administration so in reality the counties received more than 60.33 per cent of these funds. However, in advising you as to funds not available to your county for the months of May and June, 1951 we refer only to your proportionate share of the 60.33 per cent of the funds.

On or about April 1, 1950 the Federal Government, through the U. S. Public Health Service, notified the State Board of Health that there would be available Federal funds in the sum of \$782,500.00. This allocation was later confirmed and budgets were prepared on such a basis. The budgets were approved by the U. S. Public Health Service and the sum of \$430,920.87 was paid into the State Treasury.

On or about November 1 we were advised by the U. S. Public Health Service that \$131,400.00 had been withheld from the allocation of \$782,500.00 so that there would be distributed, on a yearly basis, only \$651,100.00. Below we present a detailed statement of these funds by the various categories:

Fund	Original Allocation	Final Allocation	Total Loss
Venereal Disease Control	\$242,600	\$144,800	\$ 97,800
General Health	288,400	275,000	13,400
Tuberculosis Control	156,700	147,400	9,300
Heart Disease Control	40,300	34,100	6,200
Cancer Control	54,500	49,800	4,700
Total	\$782,500	\$651,100	\$131,400

We went to Washington, D. C. to see if something could be done by the U. S. Public Health Service, and were definitely informed that no funds were available other than the amount named as a final allocation. We went to the Department of Defense in the Pentagon Building and discussed the problem with Lt. General Schwitzenberger. Since our V. D. Control program is an essential part of defense, he took it up with the Bureau of the Budget as an engagement was made in our presence. Nothing, however, was finally done about it, although we were informed by the Junior Senator from South Carolina, in a telegram, that the Budget Bureau called up and stated the funds would be released.

This matter was called to the attention of the General Assembly and a request was made for \$131,400.00 in the Deficiency Appropriation Bill. It was approved by the Senate and remained in the Deficiency and Supplementary Appropriation Bill and went to the Free Conference Committee where it was stricken out.

A few months ago, Dr. J. I. Waring resigned from the Executive Committee and accepted a full time position as Assistant Director of Maternal and Child Health. By experience and training, Dr. Waring is eminently fitted to render valuable service in this department.

Dr. R. W. Hanckel of Charleston was appointed to fill his place on the Executive Committee and has been commissioned by the Governor.

A resolution passed by the House of Delegates of the American Medical Association in 1942 was reiterated on the 11th of last month by a trustee of the American Medical Association testifying before a congressional committee and I would like to quote what he said:

"Our Association has long believed that the effective and properly operated local health unit is fundamental to the maintenance and improvement of the health of the people, so the following resolution was passed:

"Whereas, A major inadequacy in the civilian health protection in war as in peace time continues from the failure of many states and of not less than half the counties in the states to provide even minimum

necessary sanitary and other preventive services for health, by full time professionally trained medical and auxiliary personnel on a merit system basis supported by adequate tax funds from local and state and where necessary from federal sources; therefore be it

Resolved, That the Trustees of the American Medical Association be urged to use all appropriate resources and influences of the Association to the end that, at the earliest possible date, complete coverage of the nation's area and population by local, county, district or regional full time modern health services be achieved."

The hope and aim of the Executive Committee is to carry out the principles of this resolution as far as possible here in South Carolina. We ask the wholehearted support of the members of the South Carolina Medical Association to attain this goal and to make this state a safe, healthy and happy place in which to live.

REPORT OF DELEGATE TO A. M. A.

DR. HUGH SMITH, M. D., SEN. DELEGATE

The A. M. A. has continued an active program constantly directed toward its main goal—the advancement of all things good for medical science, medical education and the public health. Article 2 of our constitution states—"The objects of the association are to promote the science and art of medicine and the betterment of public health."

A—During the past year one very important development was a decision of the College of Surgeons to give up its program of Hospital standardization. For years the College of Surgeons had done this important work without help and at great expense. The American Hospital Association began studies of a plan to take over this work. Recognizing that any program of Hospital standardization would have a direct bearing on the standards of medical practice in Hospitals, the Board of Trustees of the A. M. A. began a study of this vital job and there is now a plan whereby the A. M. A. through its Council on Medical Education, the College of Surgeons, The College of Physicians and the American Hospital Association will carry on this very important program. Such an arrangement will insure continued medical influence in Hospital standards.

B—The Constitution of 1950 has made certain changes in membership classifications,—it has also made membership dues a requirement. It is now necessary that we pay dues as follows—to our county society and through its treasurer, dues to the state association, and to the A. M. A. County society dues vary with each society to fit its particular needs. Our state association dues are now twenty dollars annually and the A. M. A. dues are now twenty-five dollars annually. This last sum includes your subscription for the Journal of A. M. A. nominally \$15.00 per year. There is then \$10.00 for the other many fold activities of our National Association. This \$25.00 to A. M. A. makes you an active member of the association. If you desire to become a Fellow of the Scientific Assembly, which carries full activity privileges in all the scientific assemblies you must first apply to the secretary of A. M. A. and second pay an additional \$5.00 annually to A. M. A.

In 1950 there were recorded in the 18th Edition of A. M. A. Directory, 1476 physicians in South Carolina. 1180 of these were members of the State Association. Of these 365 were classified as Fellows and another 369 subscribed to the Journal of A. M. A. It would appear that 734 members were qualified last year for

Fellows. Let me again remind you that to become a Fellow requires that you apply to the Secretary of the A. M. A. and also that an annual additional dues of \$5.00 is necessary.

Just as the cost of all other expenses have multiplied in your own activities, so have the cost of A. M. A. increased. In addition A. M. A. is no longer a strictly scientific organization. We now have dynamic leadership actively interested in our struggle to remain free in private practice. As a result of the \$25.00 assessment in 1949 A. M. A. was able to employ a nationally known Public Relations organization to bring to the public the danger of socialized medicine and to remind the public constantly of the good job being done by the private practitioners of this country. By continually presenting the facts to the public and to the Congress we have won our first skirmish with the Fabian socialists now entrenched in Washington. We have not won the FIGHT. We—you and I—must continue to support wholeheartedly this program, if not alone for the public welfare, then certainly in defense of our own liberties and freedom to continue the private practice of medicine. Remember that Mr. Truman is still President of these United States and that to date he still has around him Mr. Oscar Ewing, General Vaughan, Mr. Acheson and so far as I know Mr. Maragon.

Utopia is a pleasant dream—the public is gullible and the promise of freedom from any worry—the thought of free medical and hospital care—the promise of security—most certainly appeals to those who do not like to admit that only by personal effort and integrity can real security ever obtain.

C—A recent survey shows that there are now 329 community systems of night and emergency calls for medical help. This has proven an important forward step and has filled a real need in larger communities. Such plans have been good publicity — have been praised by the Press and have muffled a serious defect which has existed not too infrequently all through the country. There is never any excuse acceptable to the public when any person acutely or critically ill can not get medical help. There are only a few cities in South Carolina where such a plan is needed, but I hope our larger societies will take steps to fill this need in the very near future. Let's plan now to make it possible for anyone to get medical help promptly in an emergency.

D—A grievance committee is another thoroughly worthwhile program for our association. In a state as small as ours it would seem that a central committee of five—perhaps the five last living presidents of the Association—could be established to hear complaints against any member. This committee would strive to clarify misunderstanding and to adjust where advisable complaints brought to it by anyone who felt that he had a just charge against any member of our association. The existence of such a committee would increase the public confidence in our determination to uphold ethical and proper standards. I venture to say very few complaints would even reach such a committee, but again—our willingness to hear just complaints would enhance the prestige of our association.

E—Last December the Board of Trustees made a momentous announcement when they organized the American Medical Education Foundation and gave it \$500,000.00. Shortly after its announcement the California State Association gave \$100,000.00. Many other organizations and corporations are contributing to this fund. The moneys are to be given outright—with no strings attached—to medical colleges in financial need—that applies to most of them, unfortunately. It is hoped that a large number of members of A. M. A.

will give 100 dollars or less, as they can afford, annually to this Foundation. As you know the cost of medical education is enormous and the fees collected by the Medical College pay only a small part of the cost per student. Perhaps this association can contribute at this meeting some part of its capital funds to the American Medical Education Foundation. I recommend such action to this House of Delegates.

In conclusion may I pay tribute to your other delegate to A. M. A.—Julian Price is one of the active and best liked men in the House of Delegates. Last December he served as Chairman of the Reference Committee on Constitution and By-Laws. He is President this year of the Conference of Presidents and other officers of the State Associations of the United States. He is a member of the State Journal Advertising Bureau, which represents 34 state medical journals, representing 42 constituent state associations. We are fortunate indeed in having him as one of our delegates to A. M. A., and as Editor of our State Journal. It has been a pleasure to serve you with him.

REPORT OF STATE BOARD OF MEDICAL EXAMINERS FOR 1950

DR. N. B. HEYWARD, M. D., SECRETARY

Licensed by examination	59
Licensed by reciprocity	45
Total	104
Expenses for the year, 1950	\$2,826.97
Receipts for the year, 1950	4,140.00

Two efforts made by the Legislature to change the Medical Practice Act this year, one to compel the admission of a non-qualified Grade B man to our examinations, which was defeated and the other to change our licensing system, which is still pending and will be acted on in the 1952 session of the legislature.

REPORT OF CANCER CONTROL COMMISSION

DR. J. R. YOUNG, M. D.

The Cancer Committee of our State Medical Association which also serves in an advisory capacity with the State Board of Health as the Cancer Commission and also as the Executive Committee of South Carolina Division of American Cancer Society, presents herewith its annual report.

We would emphasize first, the cordial relation that exists between the voluntary organization—the South Carolina Division of American Cancer Society, and the tax supported Cancer Division of State Board of Health.

The American Cancer Society has recently awarded to Dr. Ben Wyman a medal for outstanding work in the interest of cancer in South Carolina. This award was made upon the recommendation of your committee and was based not upon any outstanding discovery of Dr. Wyman but upon his ability in securing from the state legislature an increasingly liberal support of the Cancer Division of State Board of Health and for his ability in promoting a spirit of cordiality between the State Board of Health and the State Division of American Cancer Society.

We wish to commend the editor of the Journal of South Carolina Medical Association for the series of articles on cancer from Dr. Postlethwait, Director of Cancer Clinic of Medical College. The articles that have been presented have been well prepared, and we are glad to note that Dr. Mayo is taking over this editing of cancer section of the Journal since Dr. Postlethwait's leaving.

The Cancer Division of State Board of Health is being ably directed by Dr. Frank Geiger. The com-

mittee recommends that all the members of the Association who have the opportunity read the full annual report of Dr. Geiger. This report presents in an interesting way the cancer problem in our state, and gives in considerable detail the program of the cancer control effort.

From this report we glean the following facts:

The work of the Cancer Division of the State Board of Health revolves largely about eight cancer clinics which are situated in general hospitals throughout the state. All of these cancer clinics now meet the minimum requirements set up by the American College of Surgeons.

During the last fiscal year the number of new patients seen in these clinics was 2,121. However, only 1,218 or 54% were found to have cancer and the other 943 or 46% proved to be non-malignant. In addition to the 1,218 new cancer patients the clinics treated 1,108 patients who were previously found to have cancer, the total number being 2,326.

The fact that about one-half of these patients were found not to have cancer was fortunate so far as the patients were concerned, but it was expensive so far as the funds of the Division were concerned. Every year the funds appropriated by the legislature are exhausted before the end of the fiscal year and we are unable to hospitalize any new patients on account of lack of funds. Your committee therefore, urgently requests that doctors referring patients to the cancer clinics use all reasonable means of arriving at a diagnosis before referring them to a state aid clinic.

However, the main reasons that the funds are exhausted long before the end of the fiscal year are, (1) the increasing cost of hospitalization and, (2) an increasing number of patients referred to the cancer clinics. To meet this situation Dr. Geiger in his report urgently requests that efforts be made to secure a larger appropriation for the Cancer Division of the State Board of Health. Your cancer committee concurs in this recommendation.

From the reports of the eight cancer clinics we learn that there continue to be too many advanced patients presenting themselves for treatment. However we are seeing not only advanced cases but a few cases that are early and amenable to treatment.

It is the opinion of the authorities in cancer control that the voluntary health organizations such as the American Cancer Society are, through its programs of lay and professional education, beginning to break down the feeling of despair that was formerly associated with cancer. It is the opinion of your cancer committee that much more can be done in our state than has hitherto been done. We believe that the goal as announced by the American Medical Association and the American Cancer Society, "Every doctor's office should be a cancer detection center" can be attained in South Carolina. The pilot studies in cancer detection carried out in Orangeburg, Columbia and Anderson for the past several years at least demonstrated that many people of our state desire to have a so-called cancer detection examination. Progress in this direction can be made by projecting a state wide program of education on a county level. Members of the cancer committee of County Medical Societies would be the key persons in this educational program. By working with the local county chapter of American Cancer Society a program of education for the public based on material furnished by the American Cancer Society has been found effective. Educational material includes many pamphlets on the subject of cancer as well as interesting posters for exhibits in schools and county fairs and also many interesting films.

The Cancer Committee of the County Medical Society would also be the proper group in conjunction

with the local officers of the Society, to plan and present professional instruction concerning cancer. Here again excellent teaching films can be had from our State Division of American Cancer Society. Talks and symposia can be arranged on cancer at local and regional medical meetings.

If the county medical societies of our State Association carried out with reasonable enthusiasm such a program of cancer education for a few years, the index of cancer consciousness in the citizens of our state would certainly be increased. A necessary corollary of such a program of education would be the providing on a state-wide level of a so-called cancer detection examination in every doctor's office. Doctors, of course, know that it would not be practical to expect highly specialized examinations in every doctor's office. Such specialized procedures as bronchoscopy, cystoscopy, gastroscopy and gastro-intestinal x-ray study would not be part of the routine cancer detection examination. However the latter would include a careful examination of the patient from the crown of the head to the sole of the feet, and would include vaginal and rectal examinations. This form is being used by the California Medical Society.

Cancer Detection Examination.

Name_____ Date_____ Case No._____
Address_____ Telephone No._____
Name and Address of Relative or Friend_____
Sex_____ Age_____ Nationality_____
Personal History_____
Physical Findings_____T_____P_____R_____Wt_____
Recent Loss? _____
Head and Neck _____
Mouth (inc. lips, teeth and tongue) _____
Chest _____
Breasts _____
Abdomen _____
Rectal Exam. _____
Pelvic Exam. _____
Visual Examination of the Cervix _____
External Genitalia _____
Skin _____
Lymph Nodes (neck, axillae, groin, etc.) _____
Impression _____
Disposition _____
Date of Next Examination _____
Date_____

M. D. Examiner

Note: This examination should be approved or modified by each county medical society. If history or routine examination indicated the need of it the patient would be advised to have further specialized examination such as gastro-intestinal x-ray study, bronchoscopy, etc.

Your Cancer Committee recommends that our State Association put its stamp of approval on the plan of any county medical society that desires arranging to furnish citizens a cancer detection examination in the office of all its members at an agreed upon, uniform, price.

If the citizens of our respective counties can be shown that their home doctors are willing to make

such an examination at a reasonable fee, many interested patients will have periodic examinations carried out. When this procedure becomes a fixed habit of a large proportion of our citizens then an increasing number of early cancer cases that are amenable to treatment will be discovered.

This has been found especially true of patients of 50 years or older for the incidence of cancer in the population as a whole is not over 3 or 4 per 1000 but in people of 50 or over the incidence is 30 per 1000.

If this plan were generally approved and adopted by the doctors throughout the state it is the opinion of your committee that there would be a definite decrease in the mortality from cancer in our state. Such a plan has been successfully tried out in Illinois and is being currently proposed by the Cancer Committee of the California State Medical Association.

- J. R. Young, M. D., Chairman
- F. E. Kredel, M. D.
- W. S. Judy, M. D.
- John M. Fleming, M. D.
- Vance W. Brabham, Jr., M. D.
- W. J. Snyder, M. D.
- P. D. Hay, M. D.
- A. G. Brown, M. D.
- John Cathcart, M. D.
- H. H. Plowden, M. D.

DR. YOUNG: There is only one recommendation that may need a vote, it is this "Your Cancer Committee recommends that our State Association put its stamp of approval on the plan of any county medical society that desires arranging to furnish citizens a cancer detection examination in the office of all its members at an agreed upon, uniform, price." That means this,—We think it should be reduced to the county level and if any county medical society in the state,—if the doctors in Horry County discuss it and decide they would like to do that, it is up to them to do it, and if any member of their county society wants to do it, and agree to make any citizen an examination,— they can discuss it and decide on a price. We include in this report a blank which in our opinion might be sufficiently thorough to cover such an examination, it doesn't include bronchoscopy, and GI studies, but it does include the routine office examination.

Now, as a corollary of that we think every county medical society should have a cancer committee, a small group of maybe three who will assist the cancer society in its county in the education of the public and maybe will arrange one or more meetings a year with the Cancer Society in which the study of cancer may be furthered.

The only thing to be voted on is whether or not the House of Delegates approves of the plan I have just read.

DR. SASSER: I am wondering if Dr. Young has considered the examination of cervical smears and smears from other secretions from other parts of the body and if we might send these smears, for charity patients and it might be paid for by funds from the State.



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DR. YOUNG: That has been discussed repeatedly and our State Board of Health has advised, has reported to our advisory committee that as soon as possible, when personnel and money are available, that service will be available and it is now being done at the S. C. Medical College—a few doctors of the state are sending smears down but it is not a statewide practice as far as we know. We have made efforts to get this Laboratory service but it is not yet available.

DR. SASSER: It seems to me that there are so few men who are trained now and who are competent to examine these smears. It seems to me that since we are appropriating money for the cancer clinic at the college and they have such good pathological equipment that the State Board of Health should sponsor an appropriation for training men for examination of these smears.

DR. YOUNG: It would be a very good thing.

THE CHAIR: You have heard the recommendation of Dr. Young, what is the pleasure of this House?

(Motion was made by Dr. Weston that the recommendation be adopted, this was seconded by Drs. Sasser, Blake and Carl West, and was unanimously carried.)

REPORT OF COMMITTEE ON MILITARY SERVICE

DR. FRANK C. OWENS, Chairman

The committee on Medical Affairs was organized in accordance with instructions from Council and the House of Delegates.

The duties as outlined by the House of Delegates were as follows:

“(1) Compile data relative to every physician in the State, age, type practice, former military service, etc.

(2) To determine the availability of Physicians in South Carolina for military service in terms of the needs of the Armed Forces and of the local populace.

(3) Adopt itself to conform with such rules and regulations as may be required so that it can serve as an advisory committee to any Federal agency which may be established in South Carolina concerning the Procurement and Assignment of Physicians.”

In carrying out the first paragraph of the directive your committee sent a questionnaire, prepared by the committee, to all Medical Doctors, Dentists and Veterinarians in the State. Excellent returns were obtained. Another questionnaire, prepared by the Washington office of the National Advisory Committee was also sent to all Doctors in the State and another excellent response was secured. A file is kept on all Physicians in the State.

A committee was set up with representatives from all judicial circuits of the State as suggested by the House of Delegates. In addition a committee of Dentists, Veterinarians and a Committee from the Palmetto Medical Association (to advise on Negro Physicians). These committees held meetings and conferences, studied the status of men affected by the Draft Law, and made recommendations as to each man. In this way paragraph two of the directive was carried out.

The National Advisory Committee to Selective Service on Doctors, Dentists and allied Specialties, a part of the National Resources Board, appointed the Chairman of the S. C. Medical Associations Military Affairs Committee as the State Chairman of their State Medical Advisory Committee. In addition they appointed the head of the State Board of Health, Dr. Ben Wyman, and Dr. Neil MacAuley, D.D.S. as the other two members of the committee. Your chairman then asked that all of the members of the State Military

Affairs Committee be put on the National sub-committee. This was done. Your Committee has attended a meeting in Washington called by the National Committee and in every way cooperated with the National Committee and the State Selective Service Hq. and maintained liaison with them. We have advised them on numerous occasions relative to Doctors and conditions in S. C. In this way the third mandate of the directive of the House of Delegates of the S. C. Medical Association has been carried out.

Your committee is organized statewide as a part of the National Organization; an office is maintained, files are kept, information is furnished, investigations are made, and many questions are answered. The National Advisory Committee bears the expense, no committee member—Chairman or otherwise receives any compensation except for a per diem when attending an official meeting.

Your Committee seeks to carry out its duties fairly and impartially.

(Dr. Owens in giving his report added: “I want to pay tribute to L. P. Barnes of Bennettsville, a member of our committee, a very fine member, a very fair and impartial man in all of his advices and judgment.”)

REPORT OF COMMITTEE ON LEGISLATION AND PUBLIC POLICY

DR. D. STROTHER POPE, Chairman

BE IT RESOLVED by the House of Delegates that any member of the South Carolina Medical Association hereafter procuring as an associate in his professional practice, or to practice with him under any arrangement any physician who is a non-resident of South Carolina or who has not been previously licensed by the South Carolina Board of Medical Examiners, shall within one month following the removal of such physician into this state, or following the effective date of such arrangement, report such fact to the Chairman of the Council of the South Carolina Medical Association together with the credentials of such formerly non-resident or unlicensed physician; and

BE IT FURTHER RESOLVED, that any such unlicensed physician who may become an associate of or engage to practice in any capacity with a member of this Association, shall arrange to take the regular examination of the Board of Medical Examiners of South Carolina within six months after the effective date of such professional arrangement; and in the event of his failure to do so, or in case such physician is not a graduate of a Class A Medical School, or is otherwise disqualified from taking the examination by the Board of Medical Examiners of South Carolina, the member of this Association with whom such unlicensed physician proposes to practice shall be notified by the Chairman of Council that such arrangement is in violation of the principles governing the members of the South Carolina Medical Association, and in the event such member of the Association shall fail to terminate such arrangement within thirty days following receipt of the notice last referred to, he shall be subject to disciplinary action as provided in the By-Laws of this Association.

BE IT RESOLVED by the House of Delegates that the President of the South Carolina Medical Association be and he is hereby authorized to appoint from the membership of the Association a Committee of five to inquire into the advisability of establishing and to study the procedure which should govern the operation of a Medical Examiner System in South Carolina for the purpose of investigating deaths from violent or unknown causes, in lieu of the present system of such investigation by Coroners chosen in politi-

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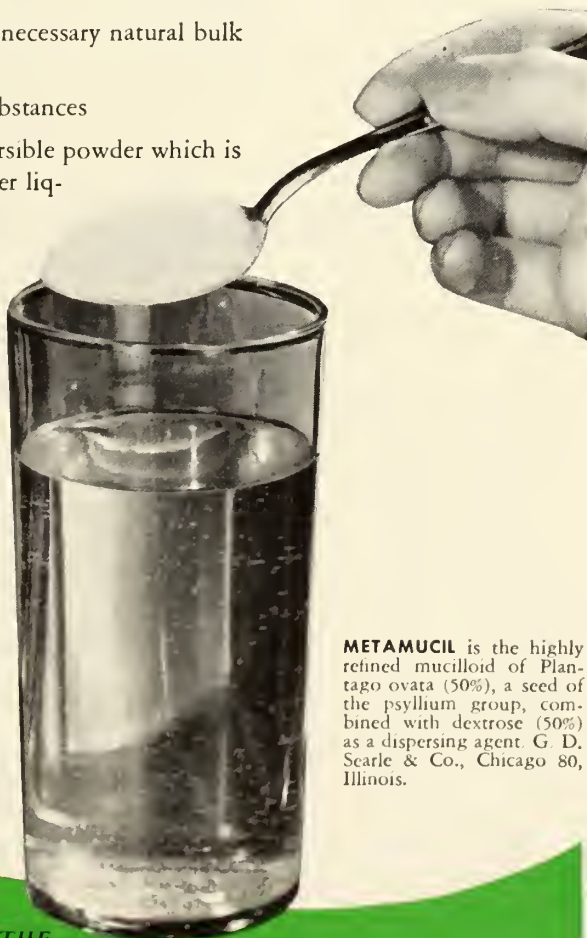
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RESEARCH IN THE
SERVICE OF MEDICINE

cal elections; that such Committee shall ascertain and inquire into the method of operation of such Medical Examiner Systems in other states wherein the same are now in effect, and shall avail themselves of the result of the studies made within the past few years by a similar Committee from the American Medical Association, and shall report its findings and recommendations to the House of Delegates at its next annual session; and

BE IT FURTHER RESOLVED, that the president of the South Carolina Medical Association be and he is hereby authorized to inform the President of the South Carolina Bar Association of this action on the part of this organization and to request the appointment of a similar Committee from the South Carolina Bar Association to pursue a like investigation and to work jointly with the Committee from this Association toward determining the advisability of establishing such Medical Examiner System and the changes in existing law which would be necessary to effect the same.

This resolution could set a permanent policy if so desired by this group which will prevent bringing into this State men who are not qualified. It takes a lot off the shoulders of the Board of Examiners and the second thing is a bill proposed by the Committee for the care of the Indigent. That bill is under consideration, in committee, and will not be brought out until the 1952 session. It will be reported on by Dr. Webb, who is chairman of the Committee on the Care of the Indigent.

This will also not be acted upon until 1952. Your State Board of Medical Examiners had been quite agitated against this bill and against the State Reorganization Board, headed by Robert Figg of Charleston. As far as I can see, personally, I can't see where the powers of the Board of Medical Examiners will be affected at all. It states that all business of all licensing bureaus shall take place in the state capital at the office of the ex-officio official, now the Secretary of State of S. C., and that he shall issue all licenses. It goes further in that all money, receipts and disbursements shall also be filed, that at the end of the year if the bill passes the minutes shall be filed and records of each Board will be available to the Governor and to the Secretary of the State. It does not construe any power of the examining or licensing board or any of the law enforcement powers of these boards shall be affected at all. Dr. Heyward is against it. The people feel the records are not being filed and kept as they should and since money is being given by the state for expenses they feel they should have a full accounting for that in the central place of the State. That, I believe, will pass. It is the Governor's bill No. 9, that he is pushing.

The last is a resolution that is offered. (Reading Resolution in regard to Medical Examiner System)

This is in keeping with the trend in line and it asks the assistance of the Bar Association to make this a cooperative move. South Carolina has functioned under the political system of having the coroner elected politically. I don't think any coroner was a doctor. I would think no damage could be done. The coroner's office is a constitutional office and can only be changed by a vote of the people.

DR. POPE: We offer these two resolutions, one on the Class B Physician and the other on asking a study of the Coroner system as now prevails as against the Medical Examiner System.

THE CHAIR: You have heard the report of Dr. Pope. The first resolution in regards to the Class B Physician, what is the pleasure of this House?

(Motion was made for its adoption by Dr. Wilson, this was seconded by Dr. Lee Sanders. The Chair called for discussion.)

DR. N. B. HEYWARD: I am not familiar with the entire contents of these two resolutions, I haven't seen them, I haven't read them. The Board of Medical Examiners have been watching these Grade-B and foreign diplomas pretty closely as you may know.

I am under the impression that what he wants to adopt is to eliminate all Grade-B men from the State, not let them come into the State to practice medicine under any pretext. The Board has considered that but we have been through times when we had to have medical help and that men have been allowed to work under the ear and under the finger, you might say, and under the responsibility of men who are licensed within the State. I don't know whether it would be wise to extend it to keep everybody out. Such men as in the Catholic Hospital in the State are not set up so that they can attract internes, because they get no credit for their work there. You need someone to work in the hospitals. They have one in Columbia and in other parts of the State. There have been men who have worked under those circumstances. We have had men here, our "Rondo Case" we hope we have that set up permanently, but those men are allowed to stay here and work here under some physician responsible for them,—but we can't afford to let down the bars and accept a Grade-B man to take our examination without continuously fighting other Grade-B men. They will come on us if we let one in. Our hands will be full trying to keep others out. So much for that question.

The question of the other matter about the Board of Medical Examiners.

DR. POPE: I mentioned that bill would not come up before 1952.

DR. HEYWARD: That bill was brought to the attention of all the Boards some two years ago. As I have stated to you before, we talked it over and wrote a letter to Dr. Williams in Hartsville and he came to the conclusion, apparently, to drop the matter, perhaps it would be better to leave things as they were, each Board functioning satisfactorily as they were.

That criticism of not being able to get information about men must have applied to some of the other boards. We have on this board chiropodists, and barber supplies, nurses, doctors, chiropractors, there are 16 of them and the idea in the state government is to get them all under one board and have them under one board and have the State Secretary issue the licenses. Technically the boards would have the same right to examine them, as they examine them now, and to recommend the appointment and the issuance of the license and the State issue the license. That is the whole situation. Our objection was threefold. (1) To carry them all into a central place or building for examination and put the secretaries in there couldn't possibly be as economical as it is presently administered. (2) It couldn't possibly be as efficient because how could two or three girls know the different affairs of the chiropractors, the engineers, the architects and the chiropodists? You can't get that much efficiency in one, two or three secretaries. The third objection was—you couldn't possibly be as much service to the public. I spend my time answering the phone certifying doctors as to whether they are legally certified to pass and to sign certain reports and things from the Veterans' Administration, insurance people, and what not. And people coming to work in the morning at 9:00 and knocking off at



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1. Towse, R. C., Berberian, D. A., and Dennis, E. W.: *New York State Jour. Med.*, 50:2035, Sept., 1950.
2. Berberian, D. A., Dennis, E. W., and Pipkin, C. A.: *Am. Jour. Trop. Med.*, 30:613, Sept., 1950.

5:00, we don't think they could possibly give the same service to the public. Those are our three objections.

THE CHAIR: I want to read this resolution.

BE IT RESOLVED by the House of Delegates that any member of the South Carolina Medical Association hereafter procuring as an associate in his professional practice, or to practice with him under any arrangement any physician who is a non-resident of South Carolina or who has not been previously licensed by the South Carolina Board of Medical Examiners, shall within one month following the removal of such physician into this state, or following the effective date of such arrangement, report such fact to the Chairman of the Council of the South Carolina Medical Association together with the credentials of such formerly non-resident or unlicensed physician; and

BE IT FURTHER RESOLVED, that any such unlicensed physician who may become an associate of or engage to practice in any capacity with a member of this Association, shall arrange to take the regular examination of the Board of Medical Examiners of South Carolina within six months after the effective date of such professional arrangement; and in the event of his failure to do so, or in case such physician is not a graduate of a Class A Medical School, or is otherwise disqualified from taking the examination by the Board of Medical Examiners of South Carolina, the member of this Association with whom such unlicensed physician proposes to practice shall be notified by the Chairman of Council that such arrangement is in violation of the principles governing the members of the South Carolina Medical Association, and in the event such member of the Association shall fail to terminate such arrangement within thirty days following receipt of the notice last referred to, he shall be subject to disciplinary action as provided in the By-Laws of this Association."

THE CHAIR: You all understand this resolution? What is the pleasure of this House?

DR. JULIAN PRICE: Might I ask for a point of information. What would be the status of a hospital which employs an interne who is a graduate of a non-recognized School?

DR. POPE: My answer would be that we are supporting the Board of Examiners, we have had men who are Class-B graduates as internes. I see no objection to having them as internes in a hospital where their functions are purely within the hospital walls, where they do not collect fees and do not go out and do private practice. In the first place your State law says that a person who is applying for the right to take the Board must be a Class-A Graduate. Have I answered your question?

DR. PRICE: I would like you to put that in your resolution because in future days difficulties might arise. I see no reason why a person may not be a Class-B graduate and be an interne. In small hospitals, they might want to use men who perhaps could not get in the larger institutions for their residencies and internship; but I think they should be specifically limited to doing interns' or residents' work without additional fee for seeing private patients and barred from collecting fees out in the community.

MEMBER: If we are to back up the Board,—they have stated you must be a Class-A graduate, how are you going to let a doctor take a Class-B man under his wing. He can't get a narcotic license, he is not certified by the Board of Examiners,—why let a man not qualified go out and do private practice? There is no such thing as practicing under another man's wing. If he is not a member of the State Board who is going to have the responsibility of supervising his methods and ethics? He can't be disciplined. Let them go in and intern but specifically as internes and residents.

If every man in this state could have a Class-B associate, it would be a "hell of a mess."

DR. MACDONALD: I would like to ask a question. Personally, I am in thorough accord with what the doctor has said but a great many of these smaller hospitals get the man within their walls and collect fees for the work a Class-B graduate does. I would not be in favor of putting in something about the Class-B. I am against the whole idea of Class-B graduates in the State of South Carolina. The hospitals must build up a staff. We would rapidly meet a situation about communities needing doctors. We succeeded in getting several of the Class-B graduates with the confines and are having trouble getting rid of them. It is unfair to the graduate of a Class-B school to come and work under a hospital staff and somebody gets sorry for him and says "he is a good fellow, let's fix it so he can stay. I am heartily in favor of the motion and I think we make a mistake ever bringing them into the State hospitals.

DR. WILKINSON (Greenville): Apropos of this subject—I have a small clipping from the Greenville paper, Congressman Joseph Bryson had introduced a special bill designed to guarantee two Spanish physicians on the staff of St. Francis Hospital permanent residency in the United States, Dr. Manuel Gurlo of Lima and his wife, both are graduates of foreign schools. They will never be eligible under the present set-up to practice medicine in South Carolina and they just don't belong in this league at all. I wired the congressman and told him to hold it up and I would be glad to come up for a hearing if he wanted to have a hearing. He wires me "Holding Spanish doctor's matter in abeyance, anxious to cooperate, signed Joseph Bryson, Member of Congress." We can depend on him cooperating in most any medical affair. These people come under the same general group. I have no patience with hospitals that delegate a certain amount of work. We ran out of interns in the Greenville General Hospital in the last two months. We had four or five out. The men on the staff ran the thing through. We didn't call for any Class-B men to come help us out. When you start belly-aching for Class-B, you better be Class-B yourself. If you want to be a Class-A, all right. We have all sorts of little outfits Class-B men can join, they don't belong in this League.

I don't know how many gentlemen read this little article I have from month to month in the Greenville County Bulletin. The burden of last month's message was to the effect that all interns to practice in South Carolina be graduates of a Class-A school and already have taken a state board, it may be their own board, wherever they come from, it doesn't matter, just so they have taken a standard Board and if they become assistant residents or residents over a period of time that they take the State Board and get a full licensure like they do in other states. We are not trying to show anybody how to run this show,—they have to do that in other states now, and there is no reason why we should take into any hospital anybody that we can't eventually have as our associate. It is just like having an extra woman, it just won't work.

THE CHAIR: Is there any further discussion? (from the floor) Call for the question. Call for the question.

DR. JOE CAIN: What is the status of it, what is the intent, the author of the bill didn't see why it should apply to hospitals but we have had other discussion in other directions, shall it apply to hospitals or shall it not?

DR. POPE: I will accept the amendment but personally I would rather not see it in. I personally agree with Dr. Wilkinson in what he says and the intent of the bill originally was that it would effect the hospitals, that we exclude all Class-B men. I am somewhat

softened by Dr. Price's opinion. I would like to see the bill apply to hospitals as well as private practice. I will say this—I won't accept the Amendment.

DR. WILKINSON: I am opposed to the amendment and I think others are.

THE CHAIR: Dr. Price mentioned having interns in the hospitals as Class-B but there has been no specific amendment offered.

DR. JOE CAIN: I would like to make an amendment to clarify the resolution: that it shall apply to Hospital Interns and to all Hospitals.

THE CHAIR: You have heard the motion and you have heard the amendment, what is your pleasure? All in favor of passage of this resolution with this amendment signify by saying "aye." (A vote was taken and the "ayes" had it.) It is so ordered.

THE SECOND RESOLUTION OF DR. POPE (Chairman Legislation and Public Policy) regarding "Medical Examiner system" was read.

DR. HANCKEL: I move the adoption of this resolution. (This motion was seconded by Dr. Hayne; there was no discussion; a vote was taken and it was passed.)

REPORT OF COMMITTEE ON RURAL HEALTH

DR. A. B. PREACHER, Chairman: Mr. President, I regret that from a local State level there is nothing to be reported at this time. It was my pleasure along with Dr. Browning to attend the National Rural Health Conference and our committee feels that we have been negligent in not sponsoring a rural health program in South Carolina and I would like to present two resolutions for your consideration as follows:

- (1) That the South Carolina Medical Association sponsor a South Carolina Rural Health Conference, just as the A. M. A. sponsors the National Rural Health Conference.
- (2) That each County Medical Society cooperate with the state group in organizing a County Health Council which is actually the working unit of this entire rural health program.

I am going to ask Dr. Browning to report on the meeting of the National Rural Health Conference and after he has finished I will ask for your opinion on the two resolutions. Dr. Browning.

REPORT ON THE 6TH ANNUAL CONFERENCE ON RURAL HEALTH OF THE AMERICAN MEDICAL ASSOCIATION

The Sixth Annual Conference on Rural Health of the American Medical Association was held in the Peabody Hotel, Memphis, Tennessee, February 23-24, 1951. It was preceded by a meeting of the National and State Committees on Rural Health of the A. M. A. on February 22nd. It was my privilege to attend the sessions of both meetings and to participate in the discussion. This was in connection with the Committee Meetings.

To report adequately on these meetings, I should like to include the entire text of most of the addresses and stenographic transcripts of the discussions; since this would necessarily require many pages of transcript, I shall confine myself to mentioning what I considered the most important and interesting features of the programs.

"Sparkplugging Rural Health" was the theme of the National and State Committees' morning session February 22nd, and the principal speakers were: Dr. F. S. Crockett, Chairman of the Committee on Rural Health of the A. M. A., and Aubrey D. Yates, Field Director, Committee on Rural Health, A. M. A. Their remarks were followed with the greatest interest.



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Reassembling after luncheon, Dr. E. K. Yantes, of Wilmington, Ohio, reported on the "Medical Aspects of the Clinton County, Ohio, Survey."

"Problems of Providing Hospital Accommodations in Rural Areas" was next on the program, the speakers being Doctors W. A. Weight of Williston, North Dakota; Allen T. Stewart, Lubbock, Texas; and W. J. Wuse, Ontario, Oregon. In the discussion period following this, I offered a few remarks on my 54 years of medical practice in a small town, rural area, as follows.

The general sessions on the morning of February 23rd, got off to a flying start, with talks by Dr. Crockett, the dynamo of this and all other of the conferences, and Mr. Yates. Mrs. Shelby Carr of Richmond, Kentucky, described how her County Council had been organized, and Dr. Yates told what the Clinton County, Ohio, County Council had done and was doing. H. E. Slusher, Chairman of the Health Committee, American Farm Bureau Federation, Jeffersonville, Missouri, dwelt upon the work of the State Health Council.

In the afternoon gathering Paul A. Miller, Extension Specialist of the Michigan State College at East Lansing, presented a progress report on a National Study of Community Health Action—sponsored by the Farm Foundation of Chicago, and conducted by the Social Research Service of Michigan State College.

Aspects of rural health from a variety of angles found the local physician, the county agent, county farm bureau president, the state grange representative, the home demonstration agent, the local health nurse, the milk producers, and the parent-teachers association, each contributing their views. This was a most interesting and illuminating feature.

At the evening session, we heard two notable addresses—Dr. Haven Emerson, member of the Board of Health of the City of New York, and Professor Emeritus of Public Health at Columbia University, who used as his subject, "Public Health and Medical Care for the Community and the Individual." "Let's Try The American Way" was the theme of the speech delivered by Mrs. Charles W. Sewell, Administrative Director of the American Farm Bureau Federation, Chicago.

Both of these addresses well repaid our close attention and I regret that the entire text of both cannot be included in this report. I am sure copies can be obtained through the office of the A. M. A. in Chicago, and of all of the talks. I strongly advise that any physician concerned with rural health, read them carefully.

The morning session of February 24th, had for its theme "Following Through Back Home." Statements were made by leaders of represented groups on what this conference meant to them, and what can be accomplished at the community level. The speakers included Herschel Newson, Master of the National Grange, Washington, D. C.; and L. J. Hetch, President, Tennessee Farm Bureau Federation, Columbia, Tennessee; H. C. Sanders, Director of Extension Service, University of Louisiana, Baton Rouge; Dr. Allen T. Stewart, Regional Director, Committee on Rural Health, Lubbock, Texas; Dr. Felix Underwood, Mississippi State Board of Health, Jackson; Eugene Butler, Editor, Progressive Farmer, Dallas, Texas; Mrs. Arthur A. Herold, President, Women's Auxiliary to the American Medical Association, Shreveport, Louisiana; and Dr. Thomas C. Shaffer, Department of Pediatrics, Ohio State University, Columbus.

In the closing session that afternoon, we had the following speakers: Dr. Dean S. Luce, Canton, Massachusetts, voted the General Practitioner of the year; Dr. Elmer T. Henderson of Louisville, Kentucky,

President of the American Medical Association; and a particularly stimulating address by Ed Lipscomb, Director of Public Relations, National Cotton Council, Memphis, Tennessee. Mr. Lipscomb is a nationally known figure in the field of public relations and his views on bringing about a better understanding of health problems of laymen, proved to be highly worthwhile—very witty and entertaining.

In concluding this report, I should like to make a comment on our meeting place—The Peabody Hotel in Memphis, Tennessee, which is one of the leading hotels of the land, and ranks with the best in such metropolitan centers as New York and Chicago. Everything possible was done to make our stay pleasant. Memphis is a wonderful city on the banks of the Mississippi River. The Medical College is also located there and my friend, Dr. Preacher, who accompanied me, naturally as a medical student at this college, knew all about it—where to go to see the various points of interest, etc., as you can well imagine!

Finally, I wish to congratulate Dr. Ben Wyman, his associates, the state laboratory, and our County Health Departments for the splendid work they are doing toward the improvement of the health of our people—especially in the prevention of contagious and infectious diseases.

(The two resolutions offered by Dr. A. B. Preacher, Chairman of Committee on Rural Health were then presented to the House.)

VOTE ON RESOLUTIONS: (Dr. Goldsmith moved the adoption of both resolutions, this was seconded by Dr. Adcock and a vote was taken and both were unanimously carried.)

REPORT OF COMMITTEE ON MATERNAL WELFARE

DR. J. D. GUESS, M. D., Chairman

Mr. President and Members of the House of Delegates:

The Committee on Maternal Welfare is grateful for the fine cooperation of the doctors throughout the State in making its studies of the causes of maternal deaths and their relative incidence possible. Except in a few isolated instances, doctors have returned their questionnaires promptly and they have furnished the desired information in a cooperative spirit. Whether it has been through oversight or negligence or a feeling of frustration because of their own lack of information, or whether they are not in sympathy with the efforts of the Committee or resentful of its methods, some few doctors have consistently refused or failed to cooperate. This is to be regretted for the failure of a few devalues statistical studies.

Studies of death certificates has brought out a number of unfortunate things regarding statements on them as to chief cause of deaths. Because a signed death certificate is necessary before burial can be done, doctors are kindly disposed to furnish such certificates, when there is no question of foul play, even though they have not seen the deceased before death. In such cases, it is obligatory that some cause of death be stated. Often, even the history of the case is so meager or so distorted that a probable guess is even impossible. Such certificates are not only worthless so far as ascertaining the true cause of death is concerned, but they tend to cause our vital statistics to be distorted and inaccurate. Pulmonary embolism is a favorite stated cause in cases of sudden or seemingly sudden death, so much so that the incidence reported for it is far higher than it is in any reported series. DeLee stated, "No infection, no embolism . . . In sudden death at delivery think of something else as causative." Williams described the typical clinical picture: "The patient complains of intense and sudden precordial

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pain, becomes livid in appearance and presents symptoms of profound dyspnea, and eventually of air hunger." Such a picture would be recognized and described with considerable accuracy by anyone seeing it, and without such a history, pulmonary embolism as a cause of death is a poor guess.

The toxemias of pregnancy still lead the list of causes of death. That they are confused and not uniform as they appear on death certificates is not hard to understand. There has for years been confusion and lack of uniformity in the classification of toxemias by the obstetrical teachers as they give them in their textbooks. The latest classification used by Eastman, Titus and Greenhill, and perhaps others, is not wholly satisfactory to the writer, but it is worthwhile because it is so simple. This classification is:

Toxemia of Pregnancy

1. Preeclampsia
2. Eclampsia
3. Essential hypertension
 - a. Without toxemia
 - b. With superimposed toxemia

If this classification is borne in mind along with the characteristics of essential hypertension, a preexisting condition, the statement of cause of death of pregnant and puerperal women dying of toxemia can be more accurately stated than is frequently the case. Further, nephritis, whether acute or chronic, as a cause of death will largely disappear.

Myocarditis or myocardial failure, which appears far too frequently, is usually a terminal condition and is not a primary cause of death.

The Committee urges then more care in the filling out of death certificates, and advocates that where neither observation nor history or both point to a reasonable fatal cause, then that the certificate state that death occurred in labor, or in pregnancy or in the puerperium, from undetermined cause.

Both the filling out of questionnaires by the doctors and the study of deaths by the Committee is greatly hampered by the time lag between the time of death and the filing of the death certificate in the Office of Vital Statistics.

The Committee holds quarterly meetings. These meetings are open and all doctors, nurses and others interested in the work are invited. They have been well attended. County health officers and maternal welfare public health nurses are always present, and they are invited to enter into the discussion. Many reports are of patients who attended their clinics. It is believed that this has encouraged better clinic care and better care by the licensed midwives. All cases discussed are unidentified as to reporting doctor and no criticism is unfriendly or antagonistic. The whole aim is that the discussions be educational. Similarly, reports sent to the doctors are not intended to be hypercritical, contemptuous or sarcastic. They, too, are intended to be educational. The best of us make mistakes of judgment or of practice at times. Furthermore, the opinion of the Committee in any case might have been different if attendant circumstances had been more fully or more accurately stated.

As a result of stimulus and interest aroused by our Committee, the negro doctors of the State have organized a Committee of Maternal Welfare, with their wives serving as an auxiliary to the Committee. They plan a program of education among their people, just as they participated actively and efficiently in the educational program of the Woman's Auxiliary of our State Association.

The chairman of our Committee was invited to speak and did speak of the Committee's work and findings, at the Seminar for South Carolina, Florida and Georgia, at the University of Georgia Medical

College last fall. Perhaps as a result of interest aroused, the chairman of the similar committee in Florida and a member of Georgia's committee were guests of our Committee at its last meeting.

The Committee recommends that the membership of the Committee be enlarged so that five general practitioners, in addition to the chairman and the secretary, be appointed to serve.

REPORT OF COMMITTEE ON PUBLIC RELATIONS

DR. C. R. F. BAKER, Chairman

DR. C. R. F. BAKER: Our Committee has not been so active this year. Our Director of Public Relations has taken care of the situation so well that we had practically nothing to do.

REPORT OF COMMITTEE ON INDUSTRIAL COMMISSION MEDICAL FEE SCHEDULE

DR. FRANK C. OWENS, Chairman

At the May, 1951 meeting of the South Carolina Medical Association, the Industrial Fee Schedule Committee of the South Carolina Medical Association recommended the approval of a minimum fee schedule guide for workmen compensation cases. This was adopted by the South Carolina Medical Association.

In November, 1950, the South Carolina Industrial Commission adopted this recommended schedule as their minimum fee schedule guide. The first change since 1936.

Copies of this guide have been sent to doctors over the state. In the foreword of the schedule is the following . . .

"All interested parties are requested to observe carefully the functioning of this schedule of medical fees, noting limitations, errors, and any provision which may be unreasonable or impractical, and file with the Industrial Commission any observations and suggestions for improvements."

In an article in the South Carolina Medical Association Journal your fees schedule committee also asked for constructive criticism. Those suggestions made to the committee were brought to the attention of representatives of the Industrial Commission.

In use it was felt that advisable adjustments might be brought to light. This has occurred in some cases and changes have been made by the Commission, for instance hernia operation was changed from \$75.00 to \$100.00, and a few other changes as indicated in the fee schedule amendment. Another change is being contemplated in allowing an extra charge for a night emergency call.

In their annual report, the Industrial Commission has this to say . . .

"We are especially grateful to the South Carolina Medical Association and its standing Liaison Committee for their efforts which led to the establishment of a schedule of medical fees for surgeons and physicians for services rendered under the workmen's Compensation Act."

The Commission has been very cooperative with the committee. The doctors of the state have been helpful and cooperative.

It is felt by the committee that progress has been made in working out an equitable fee schedule.

The committee recommends that continued co-operation be extended to the South Carolina Industrial Commission.

Dr. Frank C. Owens, Chairman
 Dr. Charles Wyatt
 Dr. William Judy
 Dr. H. F. Hall

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REPORT OF THE COMMITTEE ON THE CARE OF THE INDIGENT

DR. J. K. WEBB, M. D., Chairman

We, as a committee, were charged this year with completing a plan for the care of the indigent to be presented to the State Legislature for approval, changes and perhaps ultimate passage. Part of this we have accomplished inasmuch as the plan was completed. You will recall that at a called meeting of the Council and subsequently of the House of Delegates, this plan was presented, discussed, and approved by both bodies.

The committee then was instructed to confer with Governor Byrnes with the idea of getting his prior approval before submitting the plan to the Legislature. Also, the plan was to be made into the form of an act for presentation. This has been done.

This act was presented to Governor Byrnes who, after some time studying the plan, asked for more information. He was then supplied with the information on plans from other states. By the time we had oriented the Governor, the Legislative Session was drawing to a close.

Governor Byrnes has stated that he is in sympathy with the plan. He feels that it is needed, but he is not sure that this is the identical one that the Legislature should adopt. He made two criticisms of the plan. First, he thought the budget might be too high and that we might start off with a lower figure. Also, he made the point that the central committee should be appointed by the Governor. It is our own opinion that both of these points are well taken, and it would be a simple matter to make those changes in the plan.

Finally, the advice of the Governor was that with the educational plan taking up so much time at this Session, it requiring so much thought and so much money that it would be much better, to present our plan at the next Legislative Session. There, the matter now rests. We have the plan in the form of an act as it is contemplated that it will be introduced early in the next Session of the Legislature.

REPORT OF COMMITTEE ON MEDICAL CURRICULUM

DR. GEORGE R. WILKINSON, M. D., Chairman

Your committee has examined the curriculum of the Medical College of the State of South Carolina, our own medical school, and has come to the following conclusions:

First, the present over-all curriculum is both sound and adequate.

Second, the preclinical divisions have improved marvelously in the past five years. This division is well staffed, and deserves hearty support and appreciation.

Third, the clinical division has not had the proper facilities for expansion and improvement that it will soon have when the additional facilities are completed. Working under some handicap, this division is doing an excellent job.

Your committee is pleased and highly gratified with the success of the present administration and wholeheartedly commends the continued support of the medical school by the state association.

There is still a hue and cry for more doctors, so that anybody can pick up his telephone any time of night, and the first doctor he calls will make a dash to his bedside and as soon as he catches his breath proceed to administer to the patient's need, regardless of weather, distance, finances, or any thing else. There

is another group who desires that doctors be educated out of doors, or in very austere circumstances, by teachers underpaid, underfed, and undertrained, so as to make it possible for every moron who wants to be a doctor—and doesn't have a dime to pay for it—to obtain a diploma. In order to dispel these ideas, the public must be acquainted with the actual situation as it exists in the profession today. The central idea in this propaganda should be to acquaint the public with the difference between the doctor of today and the doctor of years ago.

It must be remembered that the public is slow in changing its traditional ideas about doctors. It still longs for the old doctor who had about a year's training, who filled his own prescriptions, did his own diagnosing, and most of the nursing. It is this sort of service that the people still crave for two dollars a visit. The integration of the medical profession has proceeded so rapidly, that it is difficult for the average person to understand the present situation. If doctors will sit down and go over the setup with their patients, explaining the function of the pharmacist and nurse, the laboratory technician, and some of the medical specialties, the patient's point of view may be brought up to date. This procedure may aid in reconciling the present medical curriculum to those in need of medical services.

UNFINISHED BUSINESS

PROPOSED AMENDMENTS TO THE CONSTITUTION

DR. JOE WARING: An amendment proposed last year is in order now?

THE CHAIR: Yes.

DR. WARING: It was proposed last year that the Constitution, Article IV, be amended to include a new type of member to be designated "Junior members," the object of this proposal was to enable interns and residents, who were qualified, to become affiliated with local medical societies and thereby come in closer touch with medical problems, etc. The proposed amendment would read:

ARTICLE IV. Of the Constitution would read:

"This association shall consist of members, honorary fellows, honorary members, junior members, and guests."

And the By-Laws would be changed with an additional section to become Section 7, under CHAPTER I:

"Any physician qualified to practice in the State of South Carolina, who is serving as an intern or resident in a hospital accredited for internship by the American Medical Association, may become a junior member of the association through the usual channels in the component societies. Such membership shall entitle the physician to all the rights and privileges of the association except the right to vote or to hold office. Such a member shall not be liable for regular annual dues of the association but he shall pay an amount at least equal to the subscription price of the Journal and such additional local dues as may be determined by the component society of which he is a member. At the end of his hospital service, a junior member shall apply through the usual channels for full membership."

It was not originally classified as to how that membership would apply to later honorary membership in the local or state association. I would like to add an amendment to the original proposed change. "His junior membership shall not apply to the term required for honorary membership in the local or state association."

THE CHAIR: You have heard the proposal, what is your pleasure?

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(DR. BLACK moved its adoption; Drs. Smith and Weston seconded the motion; there was no discussion; a vote was taken and the motion was unanimously adopted.)

DR. WYATT: I would like to ask could I introduce a new amendment now?

THE CHAIR: This is on "unfinished business," Dr. Wyatt. DR. HANCKEL: I am sure there were two other amendments to the Constitution that were brought up last year to lay over to this year, and as Secretary I remember receiving a notation from Dr. Heyward about it, but they were offered and it seems to me they should be voted on.

DR. HEYWARD: I have them, I will read them.

In the reorganization plan last year we changed a good many things, we changed the by-laws and we changed the Constitution. These changes were recommended by Council, you remember. The two amendments to the Constitution, which have laid over a year and are up for adoption or rejection are as follows:

"Amend Art. IX, Section (1) by inserting after the word "Treasurer" the words "(who may or may not be a physician or member of the association)" so that said section, when so amended, shall read as follows: "Sec. (1), The officers of this association shall be a president, a president-elect, a Vice-President, a Secretary, a Treasurer, (who may or may not be a physician or member of the association), and nine councilors."

Under this proposed amendment you could bet an officer of the association from the outside who is not a member of the association. That is the amendment that is up for adoption or rejection. It takes a two-thirds vote to adopt it.

THE CHAIR: You have heard the reading of the proposed amendment, what is the pleasure of the House?

DR. HANCKEL: Is it open for discussion? I would like to hear somebody discuss that and tell me what reason there was for inserting that, or for wanting to insert that?

DR. HEYWARD: If you are familiar with the changes that have occurred, they are trying, as is done in many states, this is not anything peculiar here, they are trying to get an executive secretary to take care of the association, and I presume, Dr. Price is here to correct me if I am wrong, that it was put in so that an executive secretary, be he a doctor or not, could be the treasurer as well as the secretary and other things. (I will correct that, not secretary, for the secretary is honorary). He could be a business manager, the treasurer and have the whole thing in his hands. That had to be put in, so that it was changed so that they could employ a layman of any description, and he could be a treasurer. Under our old constitution he would have to be a member of the association. If I am incorrect I wish to be corrected on it.

THE CHAIR: I would ask Dr. Price to clarify us on that one point.

DR. PRICE: In proposing this amendment to the Constitution the re-organization committee had in mind that South Carolina might adopt, as Dr. Heyward has said, a plan that was adopted in many states in which the executive secretary or business manager would also be the Treasurer of the Association. This would not necessarily make him such, but it would be the privilege of the Association to decide whether we would want to continue to have a medical treasurer or whether the business manager or Executive Secretary could be the Treasurer of the Association.

THE CHAIR: Thank you Dr. Price.

DR. H. SMITH: I move we adopt the amendment as read. (This motion was seconded by Dr. Joe Cain.)

THE CHAIR: All in favor of adopting the resolution make it known by a standing vote. (45 voted for; 20 voted against) It is so carried.

THE CHAIR: The next will be New Business. Is there any New Business to come up.

(Dr. Hanckel stated he was under the impression there was another amendment brought up under the re-organization plan, but this was passed over when he stated he might be wrong.)

NEW BUSINESS—Dr. Wyatt: I want to put before the House of Delegates two proposals, a change in the Constitution or amendments to the Constitution:

(1) That all committee reports and all proposals be placed in the hands of the Secretary sixty (60) days prior to the opening of this session; and in turn the Secretary shall publish these and have them mailed to the delegates of the various county societies thirty (30) days prior to the opening of this session.

Now the purpose of this proposed change is very evident. I think it will be a means of expediting the meeting of the House of Delegates and it will certainly eliminate the excuse that the various changes and proposals that are brought before this body come without pre-knowledge. In this way they will be supposedly read and they will know what the thing is all about. The second proposal is:

(2) That this body elect each year a speaker of the House who shall verse himself in parliamentary law.

I suggest these as proposed changes and I understand they must lay on the table a year.

DR. GOLDSMITH: I second the motion.

DR. PRICE: Might I call your attention to the fact that the first proposal is an amendment to the by-laws and not the Constitution and therefore it can be carried at this meeting by a two-thirds vote.

The second would be a change in the Constitution and must lay on the table a year.

DR. GOLDSMITH: That being the case I make a motion that we adopt the first amendment to the by-laws.

DR. LESESNE SMITH: I second that motion.

DR. WARING: I am under the impression that a similar thing was passed and that all reports were to be submitted in writing or in the Journal before the meeting.

DR. PRICE: That is correct, but I don't think it would be bad to propose it again.

THE CHAIR: You have heard the proposed amendment, is there any discussion? If not I will put the question. All those in favor signify by saying "aye." (The "noes" were called for; the "ayes" carried. The second amendment will lie on the table and will be voted on next year.

DR. HEYWARD: Dr. Hanckel was correct in regards to the further amendment to be voted on.

Reading:

"Amend Article V, by deleting in (3), the words "and the treasurer" and inserting the word "and" before the words "the secretary;" so that said clause when so amended, shall read as follows: "(3) The president, the President-Elect, the Vice-President and the Secretary of the Association."

THE CHAIR: We will divert back to unfinished business and vote on this amendment. You have heard the amendment, do I hear a motion?

(Motion for adoption was made by Dr. Joe Cain, seconded by Dr. Hanckel)

THE CHAIR: Those in favor of the adoption of



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Ben F. Fortune, M. D., Associate Medical Director

this amendment make it known by standing, please. (47—stood in favor; 0—stood against) It is so ordered.

THE CHAIR: At this time the Chair will recognize Dr. Goldsmith, who will speak to you.

DR. GOLDSMITH: Members of the House of Delegates, I wish to thank Council for allowing us to present this to you this afternoon. I am here to introduce to you the Executive Secretary and one of the Directors of the Association of American Physicians and Surgeons. I was informed last night by your secretary we would be allowed thirty minutes for this presentation. I will present Mr. Harry Northam, of Chicago, Illinois, Executive Secretary of the Association of American Physicians and Surgeons, Mr. Northam.

THE PRINCIPLES AND OBJECTIVES OF THE ASSOCIATION OF AMERICAN PHYSICIANS AND SURGEONS

Starting in the 1950 Spring primaries with the defeats of Senators Pepper and Graham, followed by the elimination of some Socialist-Labor stalwarts and others of leftist line, Freedom-loving people began to take heart.

Senator Taft's glorious and overwhelming victory in the face of Labor's millions and the guttersnipe tactics of the Socialists, added to the brightening hopes of preserving a Free America.

American physicians, working as individuals in the political organization of their choice, contributed much to the victory for freedom—in some states, made the decisive contribution for victory. The discovery of this heretofore latent political power of American physicians is probably the most encouraging result of the election because it demonstrated to doctors and their patients, and to their socialistic adversaries, that a new, powerful political army is now able and willing to fight Socialism on all fronts.

Specifically, the medical profession's picture began to look better, too. The multi-million dollar AMA publicity campaign had been most successful in earning the support of thousands of allies in its opposition to socialized medicine. The Association of American Physicians and Surgeons' positive program in behalf of physicians and their patients was gaining momentum and spreading its influences throughout the nation.

But the Korean situation changed all this.

This brightening picture has been blacked out by the ominous program of controls with which the Administration plans to enchain every American on the excuse that a planned economy is the only way this nation can overcome the Administration's Korean blunder and prepare the nation to fend off direct aggression by Russia.

Mandatory controls on almost everything are sure to come—many of them are here already in some foolish form or other. Economic controls—controls on wages, spending, and loss of job freedom are certain to accelerate this nation's dash towards Socialism—including socialized medicine. The once free people of this nation have not been able to break some of the chains of socialism which were forged during World War II—thus they are conditioned to accepting more regimentation. Government subsidies, which is another way of describing national socialism, thrive on abnormal economics and the experts predict that the amount of abnormalities this time will far exceed last time.

There are many ways that the Socialists can accomplish socialized medicine. We haven't time to dis-

cuss all of them, but physicians and their patients should alert themselves to 8 decisive steps to medical socialism.

They are: (1) Federal aid to medical education; (2) Expansion of the Public Health Units with more official authority for public health personnel to invade further the field of private practice; (3) Maternal and child health services, like EMIC which functioned during the last War; (4) Expansion of health co-operatives through federal aid with eventual federal control; (5) Federal financial enticement of the voluntary plans to extend hospitalization and medical care insurance services to a point of bankruptcy; (6) Medical regimentation of physicians and patients through the proposed civil defense setup; (7) Increase of medical care benefits to present veterans, the new veterans and the families of both and (8) By titanic taxation.

Although medical schools are turning out more doctors in proportion to the increase in population, the present War and the threat of World War III will be used by Osear Ewing, other Socialists and some indolent directors of some medical schools to urge federal grants to schools and scholarships for medical students. This is probably the No. 1 threat to medical Freedom. Federal aid to medical education is embodied in S-337, which was approved by the Senate Committee on Labor and Public Welfare after the Committee amended it to include federal aid to nursing schools and scholarships to nurses.

Despite the commendable action taken by the AMA at its Cleveland meeting to establish a fund to be used for private assistance to medical schools, federal aid to medical education has a good chance of being enacted into law because it is packaged with the false wrapper of "patriotism."

Federal aid inevitably will bring about federal controls of medical and nursing education no matter what is said by the propagandists for this dangerous proposal. There is no way under the sun that eventual federal control can be avoided because the Supreme Court ruled in 1942 that: "It is hardly lack of due process for the government to regulate that which it subsidizes." (317 U. S.—page 131. Last sentence of first paragraph decision by Justice Jackson in case of Wickard vs. Silburn, 1942.)

The dangers found in expansion of public health and medical regimentation through civil defense, go hand in hand. In some sections of the country there has been an increasing tendency for public health personnel to invade the private practice of medicine. Also, the Washington propagandists are preparing the people for medical care to be controlled by the Public Health Service in case of atomic attack or any other attack causing catastrophic damages. As one official of the Civil Mobilization Office states: "We will be relying upon the Public Health Service for medical guidance for the states under our long range civil defense planning."

The strategy to expand the public health services and to use this Agency as a controlling factor of medical services under civilian defense rules and regulations, took shape when Senator Hill introduced S-445. House equivalent is HR-274.

It is almost certain that this or a similar bill will be enacted into law. Even the AMA approves the bill subject to certain modifications.

Public health services when retained to their legal area of responsibilities are an accepted government benefit. But when they invade the field of private practice they become a menace to the nation's health. When they are expanded into a more powerful bureaucracy, they become an even greater danger.

It will be recalled that after the last War, Senator

To pull her together...

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Pepper and other advocates of socialized medicine did their best to have Emergency and Maternal Infant Care expanded and perpetuated. Fortunately, this was one war control which was knocked out. The Socialists look with great favor on Maternal and Child Health Services because eventually it would provide socialized medicine for approximately 40 per cent of the population. These services have been included in most of the omnibus socialized medicine bills which have been introduced into Congress—including the latest one introduced by Representative Dingell, HR-54.

Even some of medicine's Congressional friends have fallen for federal enticement of the voluntary plans. Some well-meaning legislators believe that expansion of the voluntary plans will eliminate the threat of government controlled medical care.

Of course, the socialists support them because they see the ultimate result of such proposals. In the first place, it is not possible to offer a substitute for socialized medicine because the benefits promised under government controlled medical care are impossible of accomplishment. Nor is it possible for the voluntary plans to meet the socialists' demands, and the demands made by Labor, for "complete" medical services for premium charges "within the reach of all"—unless actuarially unsound policies are sold or unless staggering amounts of government subsidies are accepted. Either way the voluntary plans would be doomed—through the government stepping in to save the bankrupted plans or by government control through subsidies.

Increasing socialized medicine for present veterans and the new veterans is indicated in the Veteran's Administration communication released on October 4, 1950. It reads: "Veterans of the Spanish-American War, Boxer Rebellion and Philippine Insurrection are now eligible for out-patient medical care without regard to service-connection."

This means that approximately 118,000 veterans have become potentially eligible for full medical and dental care through the Veteran's Administration.

If the Congress follows President Truman's budget and tax recommendations, we will be taxed into Socialism—including socialized medicine. President Truman's staggering budget asks money for socialized medicine, the Brannan Farm Plan in new dress, socialized power, socialized housing and more hand-outs to more people under Social Security.

Our spendthrift and squandering Administration says that it must have \$16 billion more from income taxes. Senator Byrd, the distinguished Democratic public servant from Virginia, declares flatly that the Truman budget can be reduced by \$9.1 billion, and he shows how it can be done in an analysis of some 97 government departments, and the tax savings accomplished without impairment of the War effort.

Senator Byrd proves that more than half of the President's proposed Terrible Tax of \$16 billion can be eliminated—if non-essential domestic spending is reduced to sane levels, and the bureaucrats give up their foolish, socialistic schemes.

There is no end to the ridiculous legislative proposals submitted by the Socialists, in many cases at the instigation of our parasitic bureaucrats for the purpose of perpetuating and improving their easy living off the taxpayers. Here are just a few:

HR-1879 is to provide research relating to child life—cost, a mere \$7,500,000 per year.

More needless legislation is HR-2476 to provide non-profit youth projects, including health services for all youth up to the age of 21—the cost, only \$50,000,000 per year. Health services is not defined, so this

could mean socialized medicine for a sizeable portion of the population.

HR-3021 proposes national compulsory total disability insurance. No one can guess the costs—a billion dollars or so per year.

HR-3030 proposes school health services—socialized medicine—cost, \$35,000,000 per year.

S-900 just about tops the list for silly legislation. It proposes a federal corporation to provide recreation for the federal bureaucrats. Here too, the sky is the limit on costs as the bill states: "Such sums as necessary are hereby authorized."

Senators Murray and McMahon would have the taxpayers spend \$300,000,000 annually to socialize further the nation's schools.

Perhaps, if you searched deeply enough you might find some merit in some of these proposals—but not now, when we should be conserving our taxes to build our military strength and to save the economic structure of this country's incomparable free enterprise system.

There are hundreds of others of inane legislative proposals pending in the present Congress. If the Administration Socialists and their cronies, the lobbying bureaucrats, should succeed in having only some of them enacted into law, we will be taxed into socialism—including socialized medicine.

Senator Byrd's Economy Program must be supported and it must succeed. And Truman's Terrible Tax must be defeated.

These dangers to Freedom and to the health of our nation, are real and imminent. They will be difficult to oppose because the Administration Socialists will play their propaganda organ with all the stops out on pathos and patriotism. When thinking Americans oppose them, the Administration's tax paid smear artists—there are thousands of them—will use the devastating stigmas of "traitorous conduct," "lack of unity," and "obstruction to the War effort." Already unity is becoming overworked to the extent that some naive Republicans and Democrats believe that the Administration shouldn't be criticized for its world-shaking blunders. But Americans must not be sucked into this "unity" engulfment. The type of "unity" subscribed to by the Socialists—blind condoning of their gross mistakes—will not achieve the preservation of a free America. If we stand by while the left-wingers use the emergency to accelerate this country's march to Socialism, we will have neglected our duty to the boys in the foxholes, because after their return from victory over Communism, they will find at home an equally vicious enemy—Socialism and socialized medicine.

The members of the Association of American Physicians and Surgeons believe that in these many threats to Freedom and these many threats to the preservation of quality medical care, you will find sound reasons why AAPS—the profession's fighting business association—must be kept strong through the active and financial support of an ever increasing number of eligible American physicians.

The Association of American Physicians and Surgeons was organized in December, 1943 by a group of AMA members, who saw the need for the medical profession to have a national organization to represent it in the socio-economic aspects of medical practice: Medical economies, public relations and legislation.

AAPS does not compete with, nor oppose any other ethical group. In fact, eligibility for membership in the AMA is pre-requisite to membership in AAPS in accordance with the Association's By-Laws.

The program of the Association of American Physi-

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Hamblen, E. C.: North Carolina M. J. 7:533 (Oct.) 1946.

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*Perloff, W. H.: Am. J. Obst. & Gynec. 58:684 (Oct.) 1949.

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cians and Surgeons is a positive one calling for concerted action along some of these main lines:

AAPS is for wide application of the insurance principles to the costs of medical care under proper voluntary methods.

It is for the education of the people to the use and benefits of proper voluntary insurance plans.

AAPS is for an endless public relations program which places emphasis on public relations at the individual patient-doctor level.

The Association is for the enlightenment of the nation's youth on the value of private practice and the evils of socialized medicine (through its Annual Essay Contest for high school students).

It is for providing the opportunity to medical students and interns (through the AAPS News Letter) to understand that private practice must be preserved in the public interest and thus educate and equip them to fight the battle for Freedom.

AAPS is for effective grass roots action to accomplish good legislation in the Public interest (through its interpretive, timely Legislative Bulletins to key medical leaders throughout the nation).

It is for complete democracy in medical organizations; provides that every member shall have a voice and vote in its affairs.

It is for a program of Freedom education for all physicians and their fellow citizens because the real issue is "Freedom vs Socialism."

AAPS is for non-participation of ethical physicians in any scheme of medical service which would deprive the people of the highest quality of medical care.

The Association's record of performance shows that since its organization in December, 1943, marked headway has been made towards reaching these worthy goals.

One of the most important AAPS services, I believe, is its legislative work. Through Legislative Bulletins sent to a selected list of key medical leaders throughout the nation, we employ the modern technique of stimulating and developing grass roots influencing of legislation. To us, this is an essential service because by fighting legislation each step of the way, we are spoiling the strategy of the Fabian-Socialists of this country to attain their socialistic program by piecemeal.

John T. Flynn's book "The Road Ahead" reveals that failure to defeat the British Fabian-Socialists in the small skirmishes brought about England's downfall. We are endeavoring to avoid the mistake of "holding our fire" for the big emergency, because enough Socialist victories on the fringe fringe legislation, will achieve a complete socialistic economy—including socialized medicine—without ever creating the "big emergency."

Another most significant service is the Association's Essay Contest for junior and senior high school students on the subject: "Why The Private Practice of Medicine Furnishes This Country With The Finest Medical Care." The 1948 Purdue University poll of 10,000 high school students revealed the startling fact that 80 per cent of these youngsters believed the government should adopt some form of controlled medical care. We must reach these youngsters with the true and commendable story of the private practice of medicine because failing to do this, in a few years the majority of young voters will be advocates of socialized medicine. So far, the Contest is the best vehicle for telling medicine's story to students, their parents and teachers.

The 1951 Contest which concluded May 4 when national judges met and adjudged the best six Essays in the nation, is the 5th annual Contest sponsored by

the Association in cooperation with county and state medical societies. This year's prize winners and prizes are: 1st, \$1,000, — Miss Pat Baxter (New Orleans, La.); 2nd, \$500 — Joc Baxter Roberson (Candler, N. C.); 3rd, \$100 — Bruce Beckwith (Missoula, Montana); 4th, 5th and 6th of \$25.00 each were won by James P. Sidell (Monroeville, Indiana), Miss Ann Peters (Gainesville, Florida) and Miss Judith Mason (Anderson, Indiana).

The AAPS program of Information for Medical Students and Interns, in our opinion, is also of prime importance. Here again, these young and future doctors must be given the opportunity to learn the facts on the issue of private medical practice vs regimented inferior government controlled medical care. If we fail in the task of educating this group of coming medical leaders, they can well be the socialists' potential for having the medical profession voluntarily accept socialized medicine.

The Association's monthly News Letter is looked upon by many physicians as one of the best medical mediums for keeping physicians currently and quickly informed on the socio-economic aspects of medical practice.

Top significance also must be given to the AAPS program of Freedom education for physicians and their fellow citizens. The last elections revealed that more and more physicians realize they must fight on all fronts for Freedom—and not confine their opposition to only socialized medicine. In order to earn the help of other groups, physicians must lend their support to these groups which are facing the same threat of socialization.

The Association plans to continue this positive program of representing physicians in medical economics, public relations and legislation. Our members hope that there will be time enough to complete the job of public enlightenment to the extent the American people will never permit the socializers to sell the citizens of this country down the river into Socialism and socialized medicine.

However, if we are to face grim realities, there is the grave danger that there is not enough time to complete the program of public enlightenment. There is also the grave danger that this country may be forced into Socialism through enactment of fringe legislation, or by deprivation of our American liberties through War time rules and regulations, or by economy destroying taxation.

For these reasons, the members of this Association believe that physicians should organize for non-participation now—because it is the sole means by which American physicians can save the American people from government controlled inferior medical care. Also, it is the only means by which medicine can build a weapon with which to hold off the socializers until the program of public enlightenment has succeeded.

The AAPS plan of non-participation is simple in its design and is legal. It is a proposed action of morality by ethical physicians to protect the people from inferior medical care.

AAPS proposes merely that physicians exercise their Constitutional right not to participate in schemes for the distribution of their services which are contrary to the public interest—such schemes as national compulsory health insurance or any other socialized proposal.

Since government controlled medical care inevitably and historically results in a deterioration of medical service, and since the ethical physician holds the welfare of his patient to be paramount, AAPS believes that the vast majority of American physicians would refuse to participate because of their duty to

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their patients, to themselves, to their profession and to their country.

In the final analysis, AAPS non-participation becomes medicine's last line of defense, and most potent weapon with which to preserve a free, unhampered system of medical care.

Non-participation is not a proposed strike against the sick. Our members would continue to serve their patients—their rightful employers—as private patients exactly as they do now and have always done in the past, but they would avail themselves of their constitutional right to refuse to do so as servants of a would-be usurping employer, a political medicine bureaucracy.

British doctors demonstrated why American physicians must organize for non-participation now. In England they tried to organize for non-participation after the law was passed—in a year's time—and failed. Perhaps AAPS will never attain a majority of eligible physicians until after socialized medicine becomes law—and doctors throughout the nation are aroused to the urgency for immediate action. Despite this possibility, for 7 years AAPS has been developing a strong nucleus organization for non-participation with thousands of members from every State in the Union indoctrinated with and convinced of the ethical and moral righteousness of non-participation—an act to be taken only in the interest of the public. If and when the emergency of socialization comes, AAPS will offer American doctors a rallying point around which they can unite to refuse to do that which is wrong.

Non-participation has succeeded in British Columbia since 1936.

Non-participation has succeeded in San Francisco, California since June, 1947 and non-participation at this very moment and for the past number of months is succeeding in the Union of South Africa.

More than 300 county and 18 state medical societies have endorsed the principles and objectives of AAPS. These state societies are: Arizona, Arkansas, Colorado, Kansas, Michigan, Mississippi, Montana, New Mexico, North Dakota, Oregon, Washington, West Virginia, Wyoming, Utah, Texas, North Carolina, Iowa and South Carolina.

The AAPS plan is not a negative approach—nor are our members thinking in terms of anticipating defeat. But just as the great military leaders of the World never thought defeat yet, always, in case of defeat, had an alternative plan of battle, so must medicine be prepared with non-participation organized well in advance of the emergency.

Our members hope that your medical Society will endorse the principles and objectives of AAPS. An endorsement by your Society does not commit any physician to a membership in AAPS—it means only that your Society approves the Association's principles and objectives, in the same manner they have been approved by more than 300 other county medical societies and 18 state medical associations.

Membership in the Association is the voluntary decision of each physician. The cost is \$10.00 per year. In joining, a physician assumes the same responsibilities and obligations that he assumes when he joins his county medical society. He is free to resign at any time.

The members of AAPS believe in, support and practice good public relations. AAPS members believe in and support the voluntary plans as a reasonable and practical means of distributing the costs of medical care.

AAPS members believe that their patients should receive the finest medical care it is possible to give—

regardless of economic status. They know that this finest medical care is only achieved when the doctor is responsible to his patient and not to a blundering inept political bureaucracy. Where medical freedom and the patients' welfare are concerned, AAPS members refuse to appease because they hold that there can be no honorable compromise with evil—and socialized medicine in any form is evil.

AAPS members are confident that a vast majority of American physicians will stick together when they and their patients are faced with the deprivation of their medical Freedom, loss of which would be the forerunner to depriving all Americans of their personal liberties and to the absolute enslavement of this Free nation.

The thousands of AAPS members throughout the nation, in every city of appreciable size, hope that you will join them in their determination to preserve quality medical care in the public interest.

DR. GOLDSMITH: I take pleasure in introducing to you one of the directors of the Association, Dr. James Donenges, Surgeon of Anderson, Indiana.

DR. DONENGES: There are just a few points that I shall stress about this organization. At its very inception this organization studied the legal implications of its purposes. It is constitutional, it is ethical, it is legal and it is the moral answer in my way of thinking to a very serious problem.

I want to tell you there is no doctor in the entire Association who receives any funds from this organization for any work he does for it, no one is paid except the Executive Secretary. I have traveled over a good portion of the United States working for this organization as have many well-known doctors. They don't accept the traveling expenses. That is important for it is reasonable for you to say "what are you getting out of it?" I am getting the right to show my patients and to show a program to other doctors which I believe.

Mr. Northam has covered our organization, our objectives, our principles. He hasn't covered all of them. I am only going to bring up one or two matters of interest to the American physicians and surgeons that are important.

Every man has entered the Association voluntarily, he does so of his own free will and accord. Every man who belongs, in so doing, stands on a moral principle that is to me very important. Going back further it is the principle of Christianity, it is the principle which believes the individual is sovereign and that the gentlemen who represent us in Washington are not sovereign; that all power in Washington must emanate from the people and they can not pass power down from the top. It is a matter of individuality.

We work, too, in our county, state and national associations. I work in the Indiana State Association as hard as I can. We believe by approaching the goal of individual freedom for every person that we will achieve our ends not just for the doctors but for all men. Medicine can not survive a sea of Socialism, we cannot as citizens. You were a citizen before you were a doctor, your prime obligation is as a citizen and as a citizen doctor. In being a citizen your obligation is not to fight socialism for our own individual interest. We must be on guard to protect the individual freedom of every citizen and group of individuals in this country. The A. A. P. S. feels that we must, as community leaders and as doctors interested in the welfare of this nation be interested in the retention of our liberty. It is just the same in the over-all field of maintaining individual freedom of supporting all legislation that has as its end the reestablishment of individual freedom and oppose any legislation that would threaten the freedom of any individual or group of individuals in this land. The moral obligation of non-participation,

I am convinced, is the answer. Any man who would under coercion accept government control of his profession has forgotten why he became a doctor. I can not understand how a man could accept Government control. It stems on the sovereignty of the individual and on the right of having no third party enter into the agreement with you and your patient. I am convinced that those who will refuse to become Government servants, should these bills pass, that they will do their dead-level best to deliver a caliber, a quality of care to patients that no Government bureaucracy could supply. to prove that there is no substitute for individual care of patients, to prove the Government can not deliver, as a bureaucracy that which you and I can supply. The moral implication is that you are raising your own individuality, you are raising the individuality of your patient, that you are not going to sell out to a Government Bureaucracy.

I wish to tell you we would be very proud if you would see fit to endorse our principles, we believe in them, we have worked hard at them and we believe the men in medicine comprise the greatest group of individuals in the world.

THE CHAIR: You have heard the speakers, what would be the pleasure of this House?

DR. SMITH: I move we endorse the principles of the AAPS. (The above motion was seconded by Dr. Brockman; there was no discussion; the motion was put and was unanimously carried.)

DR. GOLDSMITH: May I have just one more word, please sir.

I am very proud of the fact that South Carolina becomes the 18th State to endorse the AAPS Program. I am sure none will regret it and I hope a good number will become members. I joined the Association several years ago and attended my first meeting October of last year and I met the finest bunch of fellows I ever met in my life. At that time our State Delegate was ill and could not go, our beloved Archie Baker. After his passing I was appointed State Delegate to fill out his term and I thank you gentlemen very much for this action.

DR. RICHARD W. HANCKEL, Jr.: This is new business. Mr. President, gentlemen of the House of Delegates, I have an amendment to the by-laws to propose and according to the constitution I believe that can be voted on this afternoon and passed, if you so desire, by a two-thirds vote. It so happens that in Charleston, and I feel quite sure in other County Societies also, there is some confusion in the minds of the members as to exactly how many delegates each society is entitled to at the annual meeting and in order to clarify that matter I should like to propose the following amendment:

(1) To amend Chapter IV of the By-Laws by adding a new section to be numbered 3, and by numbering the remaining sections to conform, such new Section 3 to read as follows:

"The number of delegates elected by each component society shall be based upon the number of members in good standing of such society, as of Dec. 1st in each year."

I selected December 1st because the Delegates for the AMA are selected by the State Association as of December 1st and this will simplify the bookkeeping in the matter. That is the resolution I wish to offer.

PROPOSED AMENDMENT TO THE BY-LAWS

Amend Chapter IV of the By-Laws by adding a new Section to be numbered 3, and by numbering the remaining sections to conform, such new Section 3 to read as follows:

"The number of delegates elected by each component society shall be based upon the number of members in good standing of such society, as of December 1st of the preceding year."

(Dr. Wyatt made a motion that the amendment be accepted and this was seconded by Dr. Waring.)

DR. HUGH SMITH: May I call Dr. Hanckel's attention and ask if he will amend his amendment to read "December 1st of the preceding year," instead of December 1st "in each year?"

DR. HANCKEL: The amendment is accepted.

THE CHAIR: All in favor of the motion please stand. (The vote in favor of the motion was unanimous.)

DR. WM. H. FOLK of Spartanburg: Dr. Folk discussed the Blue Shield Plan in detail, giving his objections to it and closed with

"Gentlemen, since the South Carolina Medical Care Plan in its creation, activation, motivation, denies the three principles which were required of us to become doctors, namely that we be men of intelligence, that we be men of education and that we be men of moral character, it must be destroyed. I do hereby make a motion before this House (1) that the South Carolina Medical Care Plan be declared null and void by this House and that the vote be held by secret ballot. (2) that the corporation lawyers of this association be instructed to take all technical and legal steps necessary that this creature doctor dictatorship, in the pre-pay insurance business, tax exempt, shall be with us no more. I thank you.

THE CHAIR: You have heard the motion, what disposition do you wish to make. Is there any discussion?

DR. LESESNE SMITH: The last speaker has made a motion and I wish to second this, by a secret ballot, and that we vote on it. I think he has requested it and we should vote on it by secret ballot.

THE CHAIR: Is there any further discussion. If not we will prepare the secret ballots.

DR. GOLDSMITH: How shall we mark our ballots, "yes" or "no?"

THE CHAIR: The motion reads that the S. C. Medical Care Plan be declared null and void by this House.

DR. DURHAM: If I may make a suggestion I think that should be done, after your explanation, by a rising vote. If the doctors will permit that.

DR. FOLK: I don't permit anything.

DR. DURHAM: I will make a substitute motion that this be laid on the table.

THE CHAIR: Is there a second?

DR. SASSER: I second that motion.

THE CHAIR: Motion has been made that the motion of Dr. Folk be laid on the table. Those in favor of that make it known by a rising vote. (66 rose in favor of tabling; 7 rose against.) The motion is tabled.

THE CHAIR: Is there any further New Business?

DR. FINGER of Marion: Mr. President, members of the House of Delegates, we have heard the enthusiastic talk by gentlemen from the American Association of Physicians and Surgeons, we are aware of the program that the Medical Association has fostered and which we have contributed to against socialized medicine, and all of its inroads and substitutes; we have been a little forgetful of the insidious inroad that some of our lay brothers have presented to the profession in the guise of hired medical personnel which they are exploiting in one way or another. I regret that time did not permit the mimeographing of the resolution which I now propose, as a delegate of

Marion County. I might add this resolution was discussed at Council yesterday and received the unanimous support of that body.

It seems that particularly in the Carolinas we are aware of this policy of hiring certain specialists or pseudo-specialists because of the feeling and advice by at least one large philanthropic body. Our resolution follows:

RESOLUTION

WHEREAS, Several communities in South Carolina have recently constructed or are now constructing small hospitals; and

WHEREAS, It is our understanding that some boards of trustees of hospitals have considered retaining doctors as salaried members of their staffs; and

WHEREAS, This does not seem fair to the doctors practicing in these areas, as it appears to be an infringement on private enterprise, and furthermore, it places the hospitals in the practice of medicine; and

WHEREAS, The American Medical Association has already taken cognizance of this deplorable situation by virtue of its adoption last year of the "Hess Report";

THEREFORE, be it resolved that the South Carolina Medical Association reaffirm its faith in the "Principles of Medical Ethics of the American Medical Association" as laid down in Chapter III, Article VI, Section 6, which states as follows:

"Purveyor of Medical Service—a physician should not dispose of his professional attainments or services to any hospital, lay body, organization, group or individual by whatever name called or however organized, under terms or conditions which permit exploitation of the services of the physician for the financial profit of the agency concerned. Such a procedure is beneath the dignity of professional practice and is harmful alike to the profession of medicine and the welfare of the people," and be it further **RESOLVED**

That a copy of this Resolution be sent to the Chairman of the Board of Trustees of every hospital in the state by the Secretary of this Association.

Marion County Medical Society Delegation.
Presented by Elliott Finger, M. D.

THE CHAIR: You have heard the resolution, what is your pleasure?

(Dr. Joe Cain moved the adoption of the resolution, this was seconded by Dr. Folk; there was no discussion, a vote was taken and was unanimously passed.)

THE CHAIR: I have been asked by a member of the Dental Association to ask this House of Delegates to endorse their request to the Board of Trustees and to the legislature to add a Dental Department to our Medical College, what is the pleasure of this Association?

DR. DIBBLE: I move that we endorse their request and ask the Trustees to do that.

(This motion was seconded by Dr. Adeock; there was no discussion, the vote was taken and unanimously carried.)

THE CHAIR: Is there any further New Business?

DR. DURHAM: I make a motion the President appoint from the Chair a committee to look into the feasibility and possibility of establishing a Dental Department down at our Medical School in Charleston.

THE CHAIR: The Dental Association has made that request and they asked us to endorse their request, would you still wish a committee appointed?

DR. DURHAM: You don't think you should have a committee to work with them?

DR. PREACHER: I second Dr. Durham's motion, and suggest that the Dean of the College be the Chairman of that committee.

DR. LYNCH: If he is referring to the Dean of the Institution, I withdraw the name.

THE CHAIR: Those in favor of Dr. Durham's motion to appoint a committee of three, signify by saying "aye." (The motion was carried unanimously.)

DR. LESESNE SMITH: I have a short resolution here from the State Pediatric Society:

Resolved that The South Carolina Medical Association establish a Committee for the Study of Infant Mortality, which Committee may select such phases of the subject as seem of most importance. The objective of the committee is to reduce mortality by the study of appropriate plans and by recommendations to the Association for active measures.

The Committee shall consist of five members,

1. Two (2) general practitioners appointed by the President upon nomination by the South Carolina Chapter of the Academy of General Practice, one for a one year term, one for a two year term, and hereafter for a term of two years.
2. One (1) obstetrician appointed by the President upon nomination by the South Carolina Society of Obstetrics and Gynecology for a term of two years.
3. Two (2) pediatricians appointed by the President upon nomination by the South Carolina Pediatric Society, one for one year, one for two years, and hereafter for a term of two years.
4. The Chairman of the Committee shall be appointed by the President. He shall be a pediatrician, recommended by The South Carolina Pediatric Society.
5. The Committee shall make an annual report to the Association.

DR. SMITH: I move that this resolution be adopted by the House.

(Dr. Weston seconded this motion, there was no discussion, the vote taken was unanimous.)

THE CHAIR: We will now have the election of officers.

DR. WESTON: There are occasions in everyone's life that gives them a peculiar pleasure, it is fortunate that this is the case on this occasion. I wish to present to you the name of a man who stands high in the medical profession, one who has honor in his own community, who has answered the call of his country and has answered that call with great distinction, it gives me great pleasure to present to you for President-Elect Dr. Lawrence Thackston, of Orangeburg.

(This nomination was seconded by Drs. Truluck, Brockman, Durham, Pitts, Brown)

DR. DURHAM: I would like to second that nomination and move the nominations be closed.

DR. WYATT: I second Dr. Durham's motion to close the nominations and move that Dr. Thackston be nominated by acclamation.

THE CHAIR: All in favor of the motion signify by saying "aye" (The motion was unanimously carried.)

The next will be the office of Vice-President.

DR. YOUNG: It is my pleasure to place before the House of delegates the name of a man who has been a member of this association for about thirty years and also has served his country in the war and has been active in his county medical society. In the last eight or ten years he has been a very interested

and active member of Council. I would like to propose the name of J. B. Latimer of Anderson.

(This motion was seconded by Dr. Frank Strait; Dr. Macdonald then made a motion that the nominations be closed; this was seconded by Dr. Goldsmith.)

THE CHAIR: It is moved that the nominations be closed and that Dr. J. B. Latimer of Anderson be elected vice-president by acclamation. (This motion was voted on and unanimously carried.)

THE CHAIR: The next office will be that of Secretary.

DR. WYATT: I would like to present in nomination the name of Dr. John K. Webb for secretary.

(This motion was seconded by Dr. Goldsmith and Dr. Robert Wilson.)

DR. WESTON COOK: I would like to place in nomination the name of Dr. N. B. Heyward of Columbia.

(This nomination was seconded by Dr. West, and Dr. Pitts; Dr. Sease moved the nominations be closed; this motion was seconded by Dr. Goldsmith; ballots were prepared and the following were appointed tellers: Drs. Truluck, Brockman and Wallace.)

DR. WILSON: I would like to ask if it has been determined how many delegates have been accredited?

THE CHAIR: Would the Chairman of the Credentials Committee tell us how many delegates have been accredited?

DR. BARRON: Mr. President, eighty-seven (87).

DR. PRICE: While we are doing this voting I would suggest that the President appoint a committee of two to find Dr. Thackston and bring him into the hall.

(Dr. Lawrence Thackston is brought in and goes up on the rostrum.)

DR. THACKSTON: My friends and fellow members of the S. C. Medical Association, I deeply appreciate the honor that you have just conferred upon me and I sincerely hope that I shall prove worthy of your trust. You may depend upon me to do my utmost. Thank you. (Applause.)

THE CHAIR: While we are waiting on the tellers I will entertain a nomination for the office of Treasurer.

Dr. Ellis: I nominate Dr. Howard Stokes to succeed himself.

(This was seconded by Dr. Wyatt; who made a motion that the nominations be closed. (This motion was seconded by Dr. Goldsmith and it was so ordered.)

THE CHAIR: The next is the Delegate for A.M.A., two year term.

DR. WALTER MEAD. I nominate Dr. J. P. Price who has represented this society in a magnificent manner. (This motion was seconded by Dr. Wyatt.)

DR. SEASE: I tried to get my remarks in first. We have a precedent in here I would like to see changed. We have two delegates to the A.M.A. and their terms run together. There is a possibility of sometime having both delegates new men. I would like to see these two boys changed so that we would always have an experienced man. I don't know how to do that unless we elect one for two years and the other one for three years. I make a motion that we stagger these two offices and that the senior man elected should serve for three years and the other man for two years so that we can thus stagger it and always have an experienced man as delegate. (This motion was seconded.)

THE CHAIR: Isn't that a constitutional change?

A motion is before the House that Dr. Price succeed himself. Are there any other nominations?

DR. DIBBLE: (I move the nominations be closed. This was seconded by Dr. Gaston; a vote was taken and Dr. Price was elected to succeed himself by acclamation.)

THE CHAIR: The term of Dr. Hugh Smith, which expires this year. Do I hear a nomination for this term?

DR. HAYNE: I move the present incumbent be continued. (This was seconded by Dr. Goldsmith.)

DR. HUGH SMITH: I have asked that my name not be up again. I appreciate the honor but I withdraw my name.

DR. COOK: I would like to nominate Dr. William Weston, Jr. (This motion was seconded by Dr. Durham who moved the nominations be closed; this motion was seconded by Dr. Pitts.

THE CHAIR: It has been moved and seconded that Dr. William Weston, Jr. be elected Delegate to A. M. A. by acclamation. (This motion passed unanimously.)

DR. PRICE: In view of the fact that Dr. Hugh Smith has served us in AMA and has been one of the outstanding delegates up there I move you, sir, we give him a rising vote of thanks for the service which he has rendered. (All stood and applauded.)

THE CHAIR: We have the results of the election for Secretary.

Dr. N. B. Heyward-----46 votes

Dr. J. K. Webb -----35 votes

Dr. Heyward is re-elected.

Now, Councilor for the First District, the term of Dr. J. W. Chapman.

1st District

(Motion made by Dr. Bachman Smith that Dr. Chapman succeed himself for three years; this was seconded by Dr. Weston; motion was made that the nominations be closed; this was seconded; voted on and passed and Dr. J. W. Chapman was re-elected.)

4th District

The term of Dr. J. B. Latimer.

(Motion was made by Dr. Latimer that Dr. Charlie Wyatt be elected; this was seconded by Dr. Brockman; Motion to close the nominations was made by Dr. Smith and was seconded by Dr. Goldsmith; the motion was voted on and Dr. Charlie Wyatt was elected as councilor from the 4th district.

7th District

The term of Dr. C. R. F. Baker.

(Dr. Baker nominated Dr. A. C. Bozard of Manning stating he is a man who has been very active in affairs of the state but not only is he active but he will attend the meetings and "it gives me pleasure to nominate him as councillor." Dr. Durham seconded Dr. Bozard's nomination; Dr. Smith moved that the nominations be closed, this was seconded by Dr. Durham; and Dr. Bozard was elected by acclamation.)

8th District

THE CHAIR: Since the councilor from the 8th District has been elevated to the Presidency-Elect we will have to fill that office. Do I get a nomination for Councilor of the 8th District?

DR. PREACHER: Mr. President at the last meeting of the 8th District Dr. Thackston informed us he was going to retire and the 8th District unanimously endorsed Dr. James H. Gressette of Orangeburg. (This was seconded by Dr. Albergetti of Orangeburg. It

was moved that the nominations be closed and this was seconded by Dr. Bradham. Dr. James H. Gressette was elected councilor of the 8th District by acclamation.

State Board of Medical Examiners (from the 2nd District, the term of Dr. D. F. Adcock expires.)

(Dr. Holmes Hall nominated Dr. Adcock to succeed himself; this was seconded by Dr. Durham; motion was made and seconded that the nominations be closed and Dr. Adcock was elected to succeed himself by acclamation.)

State Board of Medical Examiners (from the 5th District, the term of Dr. C. A. West expires.)

(Dr. McCants moved that Dr. West be nominated

and elected to succeed himself. Dr. Durham seconded this and moved the nominations be closed. A vote was taken and it was unanimous.)

THE CHAIR: Place of meeting for 1952 Annual Session?

DR. JOE CAIN: I move that we come back to Myrtle Beach. (This motion was seconded.)

THE CHAIR: Do I get any other motion?

(Motion was made that the nominations be closed and this was seconded, a vote was taken and passed.)

It is so ordered, we will return to Myrtle Beach for our 1952 Session.

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Present Concepts Concerning the Etiology and Therapy of Urinary Lithiasis*

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A vast literature concerning the etiology and therapy of urinary lithiasis has accumulated. The purpose of this report is to detail those concepts of this problem which are established and widely accepted. Perforce a large body of conjectural or hypothetical data will be omitted.

ETIOLOGIC FACTORS

Hyperparathyroidism.—The conception that hyperparathyroidism is a rare disease manifesting itself by osteitis fibrosa cystica is now outmoded. At the present time most cases of hyperparathyroidism are detected by intensive investigations of patients afflicted with urinary calculi.³ It has been variously estimated that hyperparathyroidism is responsible for urinary calculi of 5 to 15 per cent of patients with lithiasis. If studies for hyperparathyroidism were carried out for all patients with urinary calculi whose stones were known not to be of cystine or uric acid or of an uratic or xanthine nature, it is likely that hyperparathyroidism might be found in a larger percentage of cases. In the past it was considered that the cases of renal calculi in which hyperparathyroidism was most likely to be found were those in which there was a history of long-standing calculous disease and roentgenographic evidence of diffuse or miliary calcinosis of the renal parenchyma. Hyperparathyroidism has been found in cases in which there has been but one attack of renal colic and roentgenograms have revealed only one stone.

The diagnostic criteria of hyperparathyroidism are hypercalcemia, hypophosphatemia, hypercalciuria and hyperphosphaturia. The normal value for serum calcium generally accepted is 10 mg. per 100 cc., plus or minus 1 mg. Repeated determinations of the concentration of serum calcium may be necessary. If the average concentration of serum calcium is more than 10.5 mg. per 100 cc. the possibility of the disease

must be considered seriously. Determination of the concentration of total serum protein is necessary because of its importance in the interpretation of equivocal values for serum calcium. If the concentration of total protein is low, a normal or even reduced concentration of serum calcium may actually be indicative of hyperparathyroidism. The concentration of inorganic phosphorus in the serum is usually reduced in hyperparathyroidism (normal value: 3.5 mg. per 100 cc., plus or minus 0.5 mg.).

Hypercalciuria may be demonstrated by the Sulkowitch test. To perform this test the patient is advised to avoid milk or milk products and limit the fluid intake to 1,500 cc. daily. A few cubic centimeters of urine is added to a reagent containing 2.5 gm. of oxalic acid, 2.5 gm. of ammonium oxalate, 5 cc. of glacial acetic acid and as much distilled water as necessary up to 150 cc. The absence of clouding indicates that calcium is not present and the concentration is probably 5 to 7 mg. per 100 cc. of serum. A faint white cloud indicates normal amounts of calcium in serum and urine. Excessive clouding of this solution is presumptive indication of advanced calcinuria. Hyperparathyroidism can, in most instances, be excluded if results of Sulkowitch's test are negative, but a positive diagnosis cannot be established by positive results to this test. The latter indicates the necessity of further studies of the blood and urine.

In cases in which uncertainty persists, quantitative determination of the excretion of calcium in the urine while the patient is on a diet low in calcium is necessary. The patient is placed on a weighed diet containing 2,000 calories and 125 mg. of calcium each day. A normal person will excrete less than 100 mg. of calcium daily in the urine. A patient with hyperparathyroidism generally will excrete more than 200 mg. per day. Daily urinary excretion of 150 to 200 mg. of calcium should be regarded with suspicion.

Certain roentgenologic findings may be helpful in the diagnosis of hyperparathyroidism when there is associated disease of bone. Extensive fibrocystic

*Read at the meeting of the Medical Society of South Carolina, Charleston, South Carolina, March 27, 1951.

changes, bone cysts, giant cell tumors and pathologic fractures may be found in cases of severe hyperparathyroidism. In other cases there may be only demineralization of all bones with coarse trabeculae. The bones of the skull characteristically show a diffuse miliary demineralization with obliteration of the tables. Subcortical resorption is a characteristic finding in the long bones.

Cystinuria and Cystine Stones.—Cystinuria and cystine stones occur as the result of an inborn error of metabolism. Males are affected by the disease twice as frequently as females and there is a distinct tendency to familial occurrence of the disorder. Cystine is the amino acid which contains the sulfur of the protein molecule. It is ordinarily converted to taurocholic acid which is secreted in the bile or to sulphates which are excreted in the urine. In cystinuria the oxidation to sulphates is disturbed and large quantities of cystine are found in the urine. If the urine is alkaline the cystine is carried in solution; if acid the cystine precipitates as colorless hexagonal crystals. Cystine calculi are found to develop among 3 per cent of patients with cystinuria.

Uric Acid Stones.—Uric acid infarcts and showers of uric acid calculi noted at times in the urine of gouty patients have long been considered as being related to lithiasis. High concentrations of uric acid in the blood, or excessive excretion of this chemical in the urine has not been shown to be the cause of uric acid or urate stone.⁸ Patients with gout may have associated uric acid calculi. The majority of patients with uric acid stones, however, do not exhibit clinical evidences of gout, and determinations of concentrations of uric acid in the blood and urine of these patients yield normal findings. Uric acid stones form in an acid medium.

Oxalate Calculi.—Increased concentrations of oxalic acid in the blood and urine may occur from exogenous sources such as certain fruits and vegetables, and from endogenous errors in metabolism. Oxalate stones can form in an acid or alkaline medium.

Urinary Infections in Urolithiasis.—Practically every variety of bacteria has been found in association with urinary calculi. Certain bacteria possess the power to hydrolyze urea and liberate ammonium carbonate and are referred to as urea-splitters. This reaction can be expressed as $\text{CO}(\text{NH}_2)_2 + 2\text{H}_2\text{O} \rightarrow (\text{NH}_4)_2\text{CO}_3$. The intense alkalization of the urine that results from this process causes decreased solubility and precipitation of the calcium. Whether organisms other than urea-splitters can enter into calculous formation is not known. It is agreed that bacteria require a site of degenerated renal, ureteral or vesical epithelium on which to act before a stone-forming process can be started.

Urosthesis in Urolithiasis.—All evidence, clinical and experimental, shows that while urosthesis will not initiate formation of stones, its presence augments growth. Poor drainage is one of the greatest factors in maintaining urinary infection and calculous growth.

Vitamin Deficiency and Urolithiasis.—No therapeutic regimen has been more widely used than vitamins A and D in urolithiasis. It is generally agreed, however, that vitamin deficiency does not constitute an approximate, specific or universal cause of stone. Vitamins do not cause the dissolution or the cessation of growth of stone and alone they offer little to prevent the recurrence of stone after its removal. If vitamin deficiency is a factor in lithiasis it acts only as one of many factors entering into a malnutrition complex.

Immobilization and Urolithiasis.—Patients who are immobilized for lengthy periods frequently have urinary calculi. The factors that appear to be involved in such circumstances are hyperexcretion of calcium due to increased resorption of calcium from the skeleton and faulty drainage of the kidney owing to the patient's recumbent position.

TREATMENT

Surgical Treatment of Urolithiasis.—Surgical removal of renal stones is not always necessary. A stone may be present in a calyx or in the renal cortex for many years and may remain constant in size, produce no symptoms, result in no significant renal damage or infection and may pass spontaneously. It is sufficient to observe such stones by regular roentgenologic examinations and urinalysis for evidences of increase in size and possible renal damage. Unfortunately drugs cannot be administered by oral or parenteral routes which will cause dissolution or hasten the expulsion of renal calculi, with the possible exception of cystine and uric acid stones.

A stone in the renal pelvis or ureter presents a more pressing problem because of the greater likelihood of renal damage. Surgical removal may be necessary, but in some instances conservative therapy may be rewarded with the spontaneous passage of the stone. Among the factors which will determine the necessity of surgical removal of the stone are the age of the patient, symptoms due to the stone, size and position of the stone, function of each kidney and the degree of infection.

If it is decided that surgical removal of renal calculi is advisable a strenuous attempt to remove all renal calculi and calcific material should be made. Although pelvolithotomy is the procedure of choice, multiple nephrolithotomies or even bisection of the kidney may be necessary. The interior of the kidney may be lavaged with saline solution in an effort to remove fragments that have eluded detection. The employment of fibrin coagulum in removal of renal stones has met with approval.^{4, 7} The procedure consists of injecting a mixture of thrombin and fibrinogen into the renal pelvis and calyces. Coagulation of the fibrinogen results in a strong coagulum which contains the renal stones; the coagulum with the renal stones is removed.

At the time of surgical removal of renal stones any factor which may be responsible for their appearance or growth should be removed if possible. Thus obstructions at the ureteropelvic juncture are frequently

associated with stone. Removal of renal stones and failure to correct ureteropelvic obstruction constitutes a disservice to the patient.

Calycectomy has become more widely practiced than heretofore.^{13, 14} After removal of a stone from the calyx it may be noted that a certain calyx, by reason of a constricted infundibular portion or because of its dependency or the angle at which it joins the pelvis, forms a particularly favorable nidus for future calculous formation. In such instances it is advisable to excise the particular calyx. Finally roentgenologic examination of the exposed kidney is an adjuvant in finding residual calculi.

If the calculus is in the lower third of the ureter or if conservative therapy can be continued until the calculus reaches that site, it is possible to remove it by means of various baskets or grasping instruments, employing an endoscopic approach. The procedure is employed when it is considered best not to await possible spontaneous passage of the stone and, in capable hands, is successful in 90 per cent of cases. The stone should not be greater than 1.5 cm. in diameter and ureteral dilatation about the stone is preferred.

If vesical calculi do not pass spontaneously it is necessary that they be removed. If moderate in size they may be removed by litholapaxy; large vesical calculi may require suprapubic cystostomy. Again it is necessary to remove any obstruction found at the vesical neck or in the urethra.

Medical Treatment of Urolithiasis.—The search for a solvent for stone has gone on through the ages. Viewed from a superficial aspect the problem appears simple. It would appear that in a case in which stones composed predominantly of a certain crystalloid tend to form, treatment should be directed to altering the composition of the urine in such a way that solution of the crystalloid is favored. Of the common urinary calculi both cystine and uric acid calculi are deposited in an acid urine. Theoretically and practically it is possible to cause solution of such stones by maintaining the urine persistently alkaline with the aid of suitable oral medication.

Calcium in combination with various anions such as phosphate, carbonate and oxalate is deposited in an alkaline urine and one would assume that acidification of the urine would result in solution of such stones. In practice this has generally been found impossible and the reason for this failure is apparent.⁵ The urine is nearly saturated with calcium when it reaches the stone. The more acid the urine the more calcium it will keep in solution. However, the more acid the urine the more calcium it already contains when excreted by the kidney. In other words increasing the acidity of the urine results in increased calcium excretion in the urine and the calculus already present may increase in size rather than decrease. Furthermore in instances in which urinary infection due to a urea-splitting organism is associated with calculi, it may

be impossible to convert the intensely alkaline urine into an acid urine.

Inasmuch as the solution of most urinary calculi which contain calcium by medicaments administered orally or parenterally to alter the pH of the urine is both theoretically and practically impossible, the logical sequel is the introduction of some dissolving fluid into the urinary tract by catheter. For this purpose an acid solution containing citric acid has been employed.² Citric acid has a property other than acidity which suggests its use for this purpose. The following equation will help to make this clear:



It will be noted from the equation that the net result of adding citrate ions to a solution containing calcium ions is to divide the number of calcium ions by 3. The other two thirds of the calcium ions become caught in a complex soluble calcium citrate negative ion.

In practice the calculus is irrigated with a solution containing citric acid, magnesium oxide and sodium carbonate at pH 4.¹² The irrigation is carried out via ureteral catheters or nephrostomy tubes. Unfortunately the dissolution of the stone is sometimes incomplete and delayed and the solution results in renal and vesical irritation. The addition of urease to cause hydrolysis of the organic matrix found in association with calculi has been employed.

The latest search for a solvent of urinary calculi has invaded the field of industrial chemistry. An agent which possesses the property of dissolving most inorganic compounds of urinary calculi and at the same time has the power of hydrolyzing or dissolving proteins was the object of search. Versene¹ or calsol⁶ (tetra sodium salt of ethylene diamine tetra acetic acid) has been employed in softening water and cleaning boilers. Experimentally it has been shown to be an effective agent in the dissolution of various urinary calculi in vitro. In our limited experience with the in vivo use of this drug we have found it too irritating.

Prophylaxis Against Recurrent Urolithiasis.—After a patient has had surgical relief from urinary calculi, the major problem of the prevention of recurrent calculi presents itself. This problem was recognized in the middle ages when Frère Jacques, a famous lithotomist, stated, "I have removed the stone, it is up to God to cure the patient." Unfortunately it is impossible to shift responsibility so easily, but there remain certain procedures which may be undertaken.

A large fluid output counteracts stasis by producing a steady flow of urine, tends to keep dissolved crystalloids in solution, minimizes likelihood of infection and washes out debris and small calculi.

Stasis and infection should be combatted by suitable means.

Simple control of the urinary pH is usually sufficient to create urine which will keep cystine and uric acid in solution. These crystalloids are soluble in alkaline

urine and insoluble in acid urine and alkalization of the urine should be maintained. In addition a low or purine-free diet is suggested in the presence of uric acid calculi.

In the case of calcium stones, however, the problem is much more involved. As pointed out previously when an attempt is made to lower the pH of the urine by the administration of an acid ash diet or substances such as ammonium nitrate and ammonium chloride, the urinary excretion of calcium is simultaneously increased so that the calcium concentration per unit volume of urine counterbalances the favorable effect of the change in pH. Furthermore in the presence of urea-splitting organisms acidification of the urine may be impossible.

In general attempts to decrease the excretion of calcium in the urine by diet have been ineffective. Certainly no patient with urinary lithiasis should ingest an excessive amount of calcium; such patients should avoid milk and milk products.

Failure to decrease the amount of calcium excreted has resulted in attempts to increase the solubility of calcium. The beneficial effect of citric acid in increasing the solubility of calcium has already been mentioned. It has been shown that in the presence of urinary calculi the concentration of urinary citrate is lower than for normal adults while the serum citrate is at a normal level.⁹ Feeding large amounts of citric acid to patients with urolithiasis increases the blood citrate as in normal adults, but much less citrate is excreted in the urine than occurs in controls. It has been shown that increased excretion of citric acid can be produced by administration of estrogens. This follows from the observation that low excretion levels of citric acid occur during menstruation and high values during the middle of the cycle. However, such difficulty has been encountered in treating patients with adequate doses of estrogens that it appears such therapy is only suitable for women in their menopause who have had their uteri removed—a rather limiting qualification.

Because of failure to alter significantly the excretion of calcium to advantage, recent attempts have been made to decrease the urinary excretion of phosphate in cases of urinary phosphatic stones.^{10, 11} The general equation expressing this relationship is given as follows: $(Ca^{++})^3 + (PO_4^{==})^2 = K$ (solubility product). To prevent the concentration of these ions from exceeding the solubility product, it would serve either to reduce the number of calcium or phosphate ions or both. To reduce the urinary excretion of phosphates the patient is placed on a diet low in

phosphorus and given basaljel. The basaljel forms a highly insoluble aluminum phosphate in the intestinal tract which is entirely excreted as such in the stool. This results in reduced absorption of phosphorus into the blood and reduced excretion by the kidneys. This method has been employed in a small group of cases with encouraging results.

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Present Status of Thyroid Surgery and Indications for It*

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When performed under proper conditions and by surgeons experienced in it, thyroidectomy can be safely performed in practically all types of cases. A mortality rate of less than one per cent is the common experience in thyroid clinics. The deaths which do occur are seldom directly attributable to the operation but are due to unpredictable happenings such as coronary thrombosis, and cerebral vascular accidents. While recent advances in anesthesia, improvement in the preoperative care of the patient, and the development of antithyroid drugs have to some extent reduced the mortality, they have been especially important in permitting the performance of a more definitive operation under better control, with reduced morbidity and complications. Also, they have made possible the satisfactory performance of the operation by a large group of surgeons with less special training than heretofore required.

The most important complication of thyroidectomy is injury to the recurrent laryngeal nerves. Injury to one nerve results in speech, coughing, and swallowing difficulties, while injury to both nerves commonly results in inspiratory obstruction almost invariably necessitating a tracheotomy which is temporary or permanent according to the nature of the injury. The injury to the nerve is caused by traction, crushing, severing, or inclusion in a suture. It is best avoided by a gentle technic carried out under accurate visual control. Under some conditions it is preferable to identify the nerve, while at times, to do so would subject the nerve to increased hazard. The technical details have been well described in the literature.^{2, 3} It should be emphasized that in the advent of respiratory obstruction tracheotomy should be performed early—before breaks in compensation occur.¹

Parathyroid tetany may occur as the result of removal of the parathyroid glands or injury to them. Mild deficiencies which are manifested by increased nervousness, tingling of the fingers, and cramps are relatively common but are usually transient. The more severe and lasting deficiencies are serious, particularly if not recognized. Specific remedial agents are calcium and dihydrotachysterol. The patient can be taught to regulate the dosage. Protection is afforded the parathyroid glands by leaving intact the posterior portion

of the capsule of the thyroid gland—the site of their usual location. Ligation of the inferior thyroid artery is inadvisable as it may interfere with their blood supply. In some cases, and under conditions of excellent visual control, it is possible to identify one or both glands on either side, and thus avoid removing them.

Inadequate removal of the thyroid gland results in persistency or recurrence of the disease. Particular care should be taken not to overlook a retrolaryngeal or retrotracheal extension, or a superior strait nodule. As a general rule, it is well to leave a strip of thyroid tissue posteromedially in the tracheoesophageal groove. While this may be inadequate for the needs of the body at the time, the tendency is for any remaining thyroid tissue to hypertrophy to such an extent that a normal thyroid balance will be established during the course of a few months. A persistency or recurrence of the disease generally requires further operation. In some cases, there is a permanent thyroid deficiency. This is of no serious importance as the condition can be readily corrected by taking thyroid extract by mouth. One grain or less a day is usually adequate—seldom is more required. The dosage is best determined by a clinical evaluation of the case rather than by laboratory tests. The early characteristic symptoms are puffiness under the eyes, dryness of the skin and hair, and lack of energy.

In most cases, patients with hyperthyroidism can be prepared for thyroidectomy by the administration of iodine. This has decided advantages, particularly from a social-economic standpoint, in permitting satisfactory performance of the operation in the shortest time consistent with safety. In cases which do not respond adequately to iodine therapy, a thiourate should be administered. This blocks the formation of thyroxin at the point of its iodine uptake, and results in a remission of the hyperthyroidism. As there is some danger of a leucopenia, anemia, or other complications, these patients must be watched carefully during its administration. As the thyroid gland becomes excessively hyperplastic and vascular upon thiourate therapy, operation upon it would be unsatisfactory and risky due to technical difficulties. This difficulty is for the most part overcome by administering iodine for two or three weeks prior to operation.

The operability of a patient for thyroidectomy is determined by the cardiac condition, the state of nutrition, emotional stability, and technical difficulties anticipated. A high basal metabolic rate does not necessarily contraindicate operation, nor does a low basal metabolic rate assure a good risk.⁴

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Regarding anesthesia, the author's preference is for analgesia obtained by local infiltration of novocain for the prevention of pain, and preoperative medication and nitrous oxide sufficient to dull the sensorium. The patient is under the control of the anesthetist and talks and coughs when requested. Often they remember little or nothing of the operation. Operating under this form of anesthesia requires gentle handling of tissues and keeps the surgeon informed as to the function of the recurrent laryngeal nerves, which is of inestimable value in preventing certain forms of injury and, in case of injury, making possible reparative measures at the time. General anesthesia is preferred by many surgeons; some few use intratracheal anesthesia almost routinely. The last two methods permit a more rapid performance of the operation but are attended by a greater morbidity and a higher incidence of complications; there is the added disadvantage that recurrent nerve injuries are not recognized until after operation.

In spite of the development of antithyroid drugs and radioactive iodine, the indications for thyroidectomy have changed but little in the past twenty-five years. The field has really been extended due to the standardization of the operation and the reduced morbidity and mortality attendant upon it; also as a result of realizing its value as a prophylactic measure against malignancy in certain types of goitre.

The thiourates induce a remission of the disease but have proven disappointing as a curative agent. Their administration must be under medical supervision with laboratory control. In many cases, the symptomatic relief is only partial even in the presence of a normal basal metabolism. Their use is now mostly limited to that of preparation for thyroidectomy. In Grave's disease, radioactive iodine gives promise of playing an important role and possibly taking the place of operation as the treatment of choice. Thus far the clinical reports are somewhat contradictory. It has not had sufficient usage for proper evaluation.

Subtotal thyroidectomy is still the treatment of choice in hyperthyroidism of the Grave's disease type. The results are highly satisfactory. There is about a five per cent recurrence rate due to the continued presence or the reappearance of the cause of the disease—which is not known.

Nodular goitres are the result of previous or long standing functional disturbances. The anatomical changes are such that a return to normal is not possible. Goitres of this type are accompanied by pressure disturbances, hyperthyroidism, and potentialities of malignancy. They should be removed by a conservative subtotal thyroidectomy. The results are excellent and the rate of recurrence is low. Antithyroid drugs

may satisfactorily relieve the hyperthyroidism, but the pressure disturbances and the danger of malignancy would still remain.

Chronic thyroiditis of the Riedel's type causes pressure of a constricting nature upon the trachea. A removal of the isthmus and the anterior half of the lateral lobes gives adequate relief. Regardless of whether or not an operation is done, these patients generally develop a thyroid deficiency and require thyroid extract by mouth. The lymphoid type—Hashimoto's—of chronic thyroiditis responds well to a conservative thyroidectomy. In such cases, roentgen therapy is often satisfactory.

Thyroidectomy is strongly indicated for the removal of simple thyroid nodules. These are commonly adenomata and are frequently the site of the development of malignancy. So-called lateral aberrant nodules are to be viewed with suspicion as they are generally lymph gland metastases from carcinoma of the thyroid.

In proven carcinoma of the thyroid gland, it is advisable to remove the isthmus, the involved lobe, and at the same time perform a radical neck dissection on the same side. Subsequent Roentgen therapy is given with deep x-ray or radioactive iodine.

In carcinoma of the thyroid gland, regardless of treatment, the prognosis is very poor where the condition is clinically evident before operation. On the other hand, the outlook is excellent where it is not suspected, but is diagnosed only on microscopic examination of the specimen. As carcinoma seldom, if ever, occurs in a previously normal gland, the most effective treatment is prophylactic, which consists in operative removal of thyroid nodules, especially the single ones.

SUMMARY

Thyroidectomy can be performed with minimal mortality. Advances in anesthesia and preoperative measures have greatly reduced the morbidity and made possible a more definitive operation by a larger number of surgeons. It is indicated, much the same as twenty years ago, in Grave's disease, nodular goitre, and malignancy.

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Serum Neuritis Following Use of Rabbit Serum

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Serum neuritis is a recognized but rare consequence of the administration of various antitoxic horse sera such as tetanus or diphtheria antitoxin, and also may follow injection of vaccines and toxoids.^{1,2,3,4,5,6} The case reported here apparently followed the use of anti-influenzal (rabbit) serum, a substance which has not previously been mentioned as a causative agent.

Serum neuritis is even more unusual in children than in adults. It develops 3 to 10 days or more² after the foreign substance is given, produces severe pain (usually in the shoulder) and subsequent muscular weakness and atrophy which may require from 4 to 6 months or more for recovery. It is supposed that the mechanism of injury is by perineural oedema with compression neuropathy, from which recovery is usually complete.

A brief list of pertinent references is appended.

CASE REPORT

A white male, aged 5-3/4 years, had been delivered by forceps without injury and weighed 8 pounds, 11 ounces at birth. He was breast fed for about 6 weeks, and at about 4 months had transient eczema attributed to egg. When seen at the age of 2 years, he weighed 30-1/2 lbs. had mild hydrocoele on the right, and an indefinite rash on his shoulders. Scratch skin tests to epidermals and foods were negative except for an equivocal reaction to wheat.

At the age of 2-1/2 years he had tetanus antitoxin because of an incised wound of the forehead.

At 3 years he had some mild inguinal adenopathy and a transitory limp. A few months later he had "influenza," and shortly afterward had tetanus toxoid and booster doses of diphtheria-tetanus-pertussis to reinforce the basic doses given in infancy.

At 5 years he had mumps and at 5-1/2 years he had chickenpox. Otherwise his ailments included only mild colds.

The family history was negative except for asthma on the father's side. A younger brother aged 4, was quite healthy.

At the age of 5-3/4 years (June 4, 1950) he was seen because of complaint of soreness of his neck, which was attributed to a fall on the day before. After his fall he had been somewhat restless and nervous. On June 4 he complained of headache, had occasional slight twitching, complained of slight nausea, and had fever. He was lethargic and talked in his sleep. Examination showed nothing definite on that day, but the boy cried all night and next morning had definite stiffness of his neck. He was sent immediately to Roper Hospital.

On admission he was slightly disoriented, and showed stiff neck and hyperactive reflexes. Kernig's

and Brundzinski's signs were present. Temp. was 110.4—(rectal)—pulse 120—blood pressure 98/70. His urine was negative, leucocytes, 13,350, hemoglobin 14.5 gm. erythrocytes, 5.35 million, polymorphonuclears, 78%, lymphocytes, 24%, basophiles 1%.

Spinal fluid showed 651 cells per cubic mm., 95% of which were polymorphonuclears, 5% lymphocytes. Total protein was 41 mg. per 100 cc, sugar 27.2 mg. Smear showed *H. influenzae* type B and a culture quickly confirmed the presence of the organism.

Intradermal test with anti-*H. influenzae* type B serum was negative.

The child was put on dihydrostreptomycin, 125 mg. every 3 hours intramuscularly, and was given 2.3 gm. of sulfadiazine in one dose by mouth, then 1.5 gm. every 4 hours (with bicarbonate of soda). He received 50 mg. of anti-*H. influenzae* type B serum intravenously in 500 c.c. of 5% glucose in water in the left arm. Because of vomiting, the sulfa by mouth was abandoned that evening and 4 gm. sodium sulfadiazine were given intravenously, but because of the development of gross hematuria next day, sulfa was discontinued (the urine cleared completely and rapidly).

Next day the blood produced complete capsular swelling of the organism. Blood sulfa level was 20 mg. per 100 c.c.

Dihydrostreptomycin was continued and intravenous fluids were used repeatedly. On the 3rd day after admission chloramphenicol, 250 mg. every 6 hours by mouth was given, as the organism showed more sensitivity by test to this substance than to dihydrostreptomycin.

Fever never exceeded 102.4 (rectal) and was gone by the 4th day. Spinal fluid on the 7th day after admission showed 4 cells (90% lymphocytes) and no organisms on smear or culture—Recovery was steady and satisfactory except for one feature.

On the 2nd day after admission the child complained mildly of some pain in both arms and hands. Next day he complained again, but played with his toys. On the following day the pain was limited to his left arm but there was no disability. On the 6th day he was unwilling to move his left upper extremity; on the next day motion was distinctly limited. Next day he moved his arm very little. Spinal fluid on this day showed 4 cells, all lymphocytes, 52 mg. of protein, and a negative culture, as noted above. Mild pain and considerable disability persisted until the patient was discharged on the 8th day after admission.

A week later there was still marked weakness about the shoulder girdle. Thereafter a gradual improvement was apparent under orthopedic and physical-thera-

peutic care. A summary of the therapist's report is as follows:

"Patient first checked 6-3-'50 showed trace of power in shoulder abductors and flexors; a trace in the elbow flexors and extensors; and barely fair power in scapular abductors. The wrist and hand were weak but at least had good power.

7-3-'50. Test showed rise to 'poor' in shoulder, almost 'fair' in elbow (except only a trace in the brachioradialis) and some slight increase in power of wrist and hand.

7-18-'50. Almost fair power in posterior deltoid, still poor in anterior and middle deltoid. All other groups at least fair except only a trace in the brachioradialis.

9-27-'50. Posterior deltoid now fair.

5-11-'51. Anterior and middle deltoid now 'fair plus,' posterior 'good' so that child can raise his arm in any direction over his head. Brachioradialis has remained trace but all other lower arm and scapular musculature grade 'good plus' to normal."

SUMMARY

A case is reported in which anti-H. influenzae rabbit serum was administered for influenzal meningitis. Peripheral neuritis followed the treatment. It is thought that the serum caused the neuritis. Recovery has been very considerable but is not complete after a year.

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Athletic Injuries*

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During the past several days I appreciate that you have been pretty thoroughly battered by an array of speakers covering athletic injuries from many different aspects. Any diet, even of a favorite dish, can become tiresome by too constant repetition. In an attempt to change your diet a little, I have planned to discuss a few of the more troublesome athletic injuries from the standpoint of some of the little tricks that can allow some of these players to continue to participate effectively; also I plan to point out some of the pitfalls in seemingly minor injuries, injuries with which in my opinion no player should be allowed to continue that athletic activity. Much of what I will have to say will be medical, in nature, but that is proper, for in a large sense you are medical men with a need for understanding basic medical conditions.

Some of the treatments suggested will need to be done by physicians; some of the conditions described can be diagnosed only by X-Ray and other expert means beyond your facilities. None the less you should be aware of these possibilities and opportunities in your capacities as first rate athletic trainers.

The motto of the Medical Department of the United States Navy is "To keep as many men, at as many guns as much of the time as possible." As participants in a competitive athletic program you and I often have a similar attitude to this. But we should

constantly keep uppermost in our minds that our first duty is to the individual himself and to his future, regardless of his own wishes in the matter. After that duty has been completely served, then we are free—and it is our duty to do all we can to restore him to athletic participation as rapidly as possible.

First, let us talk about a fairly common and not serious, though disabling foot injury — the stone bruise of the heel. I have seen this injury most frequently in track men, particularly in pole vaulters. As you know the injury is caused by striking the bottom of the heel against some hard object. What actually happens is that the force of the blow tears some small blood vessels and there develops a collection of blood under pressure, deep in the heel next to the bone. This is very similar to the condition seen when the end of a finger is caught in a door or the nail struck with a hammer. Most of you are familiar with the sudden relief of pain that is experienced in these finger injuries by drilling the nail and allowing the blood under pressure to escape. Similarly with a stone bruise of the heel, if the blood collection deep in the heel is removed, the pain disappears. This can easily be done by drawing out the blood with a large bone needle after putting a little novacaine in the skin.

Ankle sprains are among the most common of athletic injuries. A sprain of a joint is caused by forcing a joint in the direction that motion takes place, but further than the normal range, or more commonly forcing the joint in a direction that motion normally does not take place, and thereby stretching or tearing, partially or completely the ligaments that

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support the joint. An ankle sprain can be of all degrees — from minor to severe. The length of disability from such a sprain depends upon first the amount of ligamentous tearing and secondly upon the immediate treatment that is received. If complete tearing of ligaments has occurred, there will be a long period of disability regardless of early treatment. But it is important to recognize this so that proper treatment can be instituted.

If only stretching or partial tearing of ligaments has taken place, then vigorous immediate treatment may greatly shorten the period of disability. One of the major causes of pain in any injury is swelling and the resultant circulatory obstruction. Immediate treatment should consist of protection from further injury, and measures designed to minimize the swelling. The immediate swelling about a sprained joint is caused by bleeding. Early treatment of a sprain, in an attempt to limit the bleeding, should consist of a pressure dressing, as by an elastic bandage, elevation of the injured ankle, and the application of cold. Cold is a physical agent that is being appreciated more and more in the field of medicine. It not only decreases the size of torn blood vessels, but also acts remarkably as an anesthetic agent in relieving pain. To be used properly it should not be simply a rubber bag with a few ice cubes placed someplace near the ankle but rather a thorough icing, like a keg of beer on the 4th of July.

After proper first aid measures have been carried out, then it becomes important to determine how serious injury has taken place. Practically all ankle sprains are caused by the foot turning in, and thus damaging structures on the outside of the joint. A sprain of any severity should be X-Rayed. By turning the foot in the direction of the injury it is frequently quite simple to demonstrate serious ligamentous tearing.

When no serious damage has taken place, I believe healing is expedited by active use of the injured joint, while supported by proper strapping to prevent further injury. Frequently there will remain a few tender spots about the injured ankle which become painful with use and prevent activity. In such selected cases I believe the use of a little novacain to deaden the painful spots is not only justified but indicated. If the pain is not localized to one or two spots, but is more generalized it is possible to inject the nerve that carries pain sensation to the ankle. This lies just beneath the skin immediately above the ankle and is easily anesthetized.

Ankle injuries of the less serious types, so treated, will often allow the injured man to continue playing, without danger of further injury beyond the usual risks of the particular sport and will actually speed the healing of the injured part.

Next let us discuss an injury seen more frequently in football players, the common "Charley Horse." Here we have an injury caused by a blow on the

thigh producing tearing and bleeding within the muscle. Once again we have a condition that may be minor or may have more serious implications. As in the case of ankle injuries the use of a pressure dressing and properly applied cold will give us a head start in the eventual healing process. This type of injury to the muscles of the thigh has the unfortunate capability of involving the covering of the bone as well, which may release into the collection of blood at the site of injury, bone cells capable of converting the entire injured area into a mass of new bone. The presence or absence of this bony involvement is the determining factor in treatment and in the question of continued athletic participation. If simply the muscle injury is present, then the use of heat, diathermy, massage and activity may be indicated. If it is determined that there are bone elements in the injured area, then just the opposite is true. The use of massage will only serve to spread the putty like mass of developing bone more widely. Activity and the opportunity for re-injury may greatly prolong the entire process. As soon as any evidence of new bone formation is seen on X-Ray, then all but essential activities should be stopped, treatment discontinued, and the developing bony mass allowed to mature. Usually, it will eventually shrink down and no radical treatment will be needed. Occasionally, the bony mass limits too much the activity of the involved muscle and the adjacent joints, and must be removed surgically.

When the newly forming bone begins to mature, if it is not too extensive and during the doubtful stages, sometimes athletic participation can justifiably be permitted with proper protection from further injury. We have occasionally used an aluminum shield padded with a half inch or more of sponge rubber, strapped over the injured area. These have proven comfortable, satisfactory, and in no case has further injury occurred.

Knee injuries are so frequent in athletics, particularly in football players, as to nearly constitute an occupational disease. There are several points about these injuries I would like to mention in passing.

First there is one type of knee injury that does not involve the joint itself, but only the lubricating layers between the skin and knee cap. Injury here may produce a swelling and collection of fluid overlying serious knee injuries. Removal of this fluid and the application of a pressure bandage may quickly cure this and there is no reason why the injured boy should not be allowed to continue to play with such a condition.

The second point I would like to make about knee injuries, and I am certain you will not unanimously accept this, is that it is my considered opinion that no athlete with a knee injury severe enough to produce increased knee joint fluid, should be allowed under any circumstances to continue athletic participation so long as that fluid remains. I have allowed this in the past, and sometimes have gotten by with it.

More frequently I have wished we had not allowed such activity. On a number of occasions surgery has eventually been required. Quite possibly the operation would have been necessary anyhow, but in many cases there remained the doubt that the continued play caused the need for surgery.

Injuries to the upper extremities are less frequent, but sometimes are equally important problems. One of the most discouraging of these to treat is the painful elbow so frequently in baseball pitchers. The usual condition seen here is termed as radio humeral bursitis. It probably really consists of a partial tearing away of muscle fibers from the bone on the outer side of the elbow.

I have about reached the opinion that there is but one cure—time. Novacaine infiltration of the tender area will afford complete but temporary relief. Since no damage is done by allowing active use while this tender area is anesthetized, I have occasionally used this in particularly important instances.

Injuries to the back of the elbow frequently produce a collection of fluid here in the bursa overlying the point of the elbow, a condition similar to the knee bursitis described previously. These are commonly seen in guards and tackles who use their elbows to good advantage. In the early stages these can best be treated by removal of the fluid-blood at first, and

by the application of a pressure bandage. When the fluid remains for some length of time the walls of the sac become thickened and there is the feeling of loose bodies in the sac of fluid. When this stage is reached, surgical removal of the entire sac is indicated. This is a relatively minor type of operation.

Injuries to the wrist in any young man should be viewed with a great deal of suspicion. A wrist sprain is a very rare injury in a man of college age, so that any wrist remaining swollen and painful should be suspected of a bony injury, frequently one of the small bones at the base of the thumb—the scaphoid bone.

Finally I should like to talk just a little about injuries to the ribs, not the crushing serious type of injuries, but ribs that have been bruised and remain painful, particularly with any muscular exertion. Having struck a steering wheel with my chest a number of years ago, I am fully aware of how painful and long lasting this type of injury can be. It is now my practice to inject these tender ribs with a novacaine preparation in oil, being in oil it is slowly absorbed and acts over a long period of time. I recently saw a physician friend of mine, with three fractured ribs, treated in such a manner, continue his medical practice with no lost time. The treatment is simple, the relief immediate, and frequently lasting.

CANCER

Edited by HENRY W. MAYO, JR., M.D., Charleston, S. C.

CARCINOMA OF THE STOMACH A CLINICAL STUDY

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The problem of gastric cancer is a distressing one. Each year approximately 40,000 deaths from this cause alone are recorded,¹⁰ despite increasing efforts to arrive at earlier diagnosis. Pack and Livingston⁶ noted in 1940 that in 92% to 98% of patients suffering from this disease, a cure is not achieved. In the experience of Welch and Allen,¹¹ 25 of every 100 cases of stomach cancer were inoperable at the time of first hospitalization, another 25 were found to be obviously incurable at operation, and, of the 50 cases in which resection was possible, only seven survived five years. However, as stated by Welch,¹⁰ cure rates up to 40 or 50% can be prognosticated in the early stage of certain types of gastric cancer.

The present study is concerned with the experience with cancer of the stomach in this institution. Between January 1, 1940, and December 31, 1950, there were 144 patients to whom this diagnosis was assigned. A few other patients were excluded from the study be-

cause their definitive treatment was carried out elsewhere. In 34 cases, the diagnosis was made on the basis of clinical or roentgenological findings alone, but in the remaining 110 cases, the diagnosis was confirmed by operation or autopsy.

The incidence according to age, sex and race is noted in Table I. The average age of all patients in the series was 55.8 years, but the youngest patient was 21 years of age, and the oldest 90. Forty of the patients were females and 104 males, and there were 40 white and 104 colored patients. The differences in distribution regarding sex and race seem to be significant, although the latter difference may be weighted by certain factors influencing the hospital population as a whole. Pain, usually located in the epigastrium, and often intermittent and related to meals, was the most common presenting symptom, occurring in 86 cases. The chief complaint in 22 cases was "gaseous indigestion." Dysphagia was present in nine cases, in all of which there was involvement of the cardia. Vomiting was the outstanding symptom in 13 cases, in each of which some degree of pyloric obstruction was found. The chief reason for seeking medical aid was weight loss in seven cases, hematemesis in two, and melena in only one. In several cases, there was no record of gastro-intestinal symptoms, and the lesions were found at the autopsy table.

One patient presented himself with symptoms of prostatism, shown at autopsy to be due to prostatic metastases from a gastric neoplasm. Another patient entered the hospital with a full blown peritonitis secondary to perforation of a previously silent stomach cancer. Many of the patients had indulged in self-medication for lengthy intervals before seeking medical aid, and a lesser number had been treated medically for some time by a physician.

The average duration of symptoms was 7.6 months. Only 16 patients had symptoms less than one month before the diagnosis was made. There appeared to be no definite relation between the duration of symptoms and the extent of disease found at operation. In general, however, the final results were poorer in those with symptoms of long duration. One patient, who has survived five years without recurrence, had symptoms for 12 months previous to operation, but the remainder of the group of 13 patients in the series who survive without recurrence had had symptoms less than six months. The average duration of symptoms in this group of 13 was only 3.8 months. Table II shows that the resectability rate was greater in those cases for which treatment was carried out fairly soon after onset of symptoms. Nevertheless, in two cases with symptoms of two years duration, and in two cases with symptoms of four years duration, the lesions were resectable.

An abdominal mass was palpated on the initial physical examination in 61 cases. Although the resectability rate was lower in this group than in the series as a whole, resections were done in seven of these cases, and two are still living and well. Thus, the presence of a mass does not necessarily indicate a hopeless situation.

Radiologic examination revealed a filling defect in the stomach or a stiffening of the gastric wall in the great majority of cases. Pyloric obstruction was the only radiologic finding in 21 cases, and obstruction at the cardia in three cases. In nine cases, doubt was expressed before operation as to whether an ulcerative lesion seen on x-ray was malignant or benign. Gastroscopy was done in 21 cases and esophagoscopy in four, and in almost all cases substantiated a clinical diagnosis of carcinoma. Papanicolaou smears of gastric washings were done in only the last few cases of the series. It is significant that free hydrochloric acid was found in only 19 of 79 gastric analyses done in this series of cases.

In recent years, the tendency has been to offer exploratory operation to every patient who is believed to have gastric carcinoma, unless distant metastases can be demonstrated. Moreover, there has been a tendency to utilize palliative gastric resection more often. This more aggressive attitude is reflected in Table III. However, only short circuiting operations were done for several poor risk patients in whom resectable lesions were found.

In 34 patients, the diagnosis of gastric cancer was not proven by operation or autopsy. No operation was performed in these cases, either because the patient refused operation, or the disease was thought to be too far advanced, or the poor general condition of the patient contraindicated operation. Twelve of these patients died in the hospital, four were lost to follow-up, and all the rest died within a year, except for one, who is known to be alive 22 months later. The question of gastric lues was raised in the latter case at the time of hospitalization.

The diagnosis of gastric carcinoma was confirmed for the first time at autopsy in 17 cases. Twelve of these were admitted in a terminal state and two refused operation; these 14 cases were found to have distant metastases at autopsy. Three cases without gastric symptoms died of other causes, and at autopsy were found to have early gastric lesions.

Only biopsies of distant metastases were carried out in two patients, and both patients died within three months. In one case, the diagnosis was arrived at by the demonstration of cancer cells in aspirated peritoneal fluid; this patient died in the hospital. In 22 cases, only exploration and biopsy was carried out. Three died in the hospital, 11 within three months, and five within six months. One patient survived eight months, one 11 months, and one was lost to follow-up.

The entire stomach was involved in three cases, and in these cases jejunostomy was performed for feeding purposes. All three died within one month. Gastrostomies were done for nine patients with involvement of the upper portion of the stomach. Eight died within six months, and one died 11 months after hospitalization.

Gastroenterostomies were performed in 26 cases of actual or impending pyloric obstruction. Four of these patients died in the hospital, a mortality rate of 15.3%. Sixteen died within six months, one died at eight months, and one at 10 months. One is known to be alive 11 months after operation. Three were lost to follow-up. The average survival time was 5.6 months for those followed.

Subtotal gastric resection was carried out in 29 cases and total (palliative) gastrectomy in one case. Thirteen of these operations were classed as palliative procedures because the operative record indicated that obvious tumor was not removed or adjacent involved viscera were resected along with the stomach. The lesion was limited to the stomach, or stomach and regional nodes, and all obvious tumor was removed in 17 cases; these are classified as "curative" operations. The results of these operations are shown in Table IV. The average survival time to date of the 11 patients surviving palliative gastrectomy is 21.6 months. A resection of adjacent invaded liver tissue was done in one of these patients, in addition to gastrectomy, resulting in survival without evidence of recurrence up to the present time, five years later. The average survival time of the 17 patients undergoing "curative" procedures, to date, is 32.1 months, but 12 of these

patients are well, without evidence of recurrence. Two of these cases, previously reported elsewhere,⁴ survive more than six months after acute perforation of the gastric carcinoma. A gastrectomy was done for one patient at the age of 77, and he is still well at the age of 83. There were no hospital deaths in this series of 17 "curative" procedures, but one patient re-entered the hospital several weeks later and died with a subphrenic abscess.

The five year survival rate, calculated on the basis of all the cases seen before the end of 1946, would be 4/71, or 5.6%. This study seems to indicate that the only way to improve this poor salvage rate is to strive for earlier diagnosis. The presently accepted pernicious advertisement of proprietary remedies for "indigestion" for lay use is responsible for the delay in treatment in many cases. The average duration of symptoms of 7.6 months before seeking treatment should be sharply reduced with further intelligent efforts to educate the lay public. However, some of the responsibility rests with the medical profession. Mass screening methods⁷ do not seem to be economically feasible. Papanicolaou smears, in this institution, have not been as valuable as others² have indicated. Allen¹ has emphasized the importance of surgical attack on gastric ulcers which fail to heal promptly on medical therapy. To quote Templeton,⁹ "... the burden of increased accuracy in diagnosis lies with the physician who first sees the patient and the roentgenologist who examines the patient." The family physician must develop an increased awareness of the possibility of gastric cancer in dyspeptic patients.

Total gastrectomy has been advocated for every case of gastric cancer by Lahey,³ and the institution of such a policy would probably result in a greater salvage rate, provided the mortality rate could be kept down to acceptable levels. It should be noted that subtotal resection has resulted in many cures. Gastric resection is the palliative procedure of choice, and probably the only one of any great value.⁸ Certainly, in this series of cases, gastroenterostomy produced moderate symptomatic improvement as regards obstruction, but failed to prolong life significantly. Massive resections of invaded adjacent upper abdominal viscera occasionally result in unexpected long-term survivals,⁵ and are thus of value in selected cases.

In conclusion, it cannot be overemphasized that cancer of the stomach is a curable disease in the early stages, and the cure rate can only be improved by earlier diagnosis.

TABLE I
INCIDENCE

Age	No. of Cases	Sex	
20 - 29	4	Male	Female
30 - 39	11	104	40
40 - 49	27	Race	
50 - 59	46		
60 - 69	39		
70 - 79	13		
80 - 89	3	White	Colored
90 -	1	40	104

TABLE II
DURATION OF SYMPTOMS IN MONTHS

	0-1	1-2	2-4	4-6	6-9	9-12	12-18	18-24	24-36	36-48
No. of Cases	16	23	35	28	11	15	3	6	1	4
Resections	5	4	7	7	1	2	0	2	0	2

TABLE III
OPERABILITY AND RESECTABILITY

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Diagnosed	8	8	15	8	9	5	18	22	12	24	15
Operated	3	2	10	4	4	2	10	13	9	18	15
Resected	1	0	1	0	1	1	7	4	5	6	4

90/144=62.5% operable
30/144=20.8% of entire series resectable.
30/90 =33.3% of operable cases resectable.

TABLE IV
RESULTS OF GASTRECTOMY

	Hosp. Deaths			Died Later Years			Alive With Recurrence Years			Alive Without Recurrence Years							
	No.	No.	%	0-1	1-2	2-3	0-1	1-2	2-3	0-1	1-2	2-3	3	4	5	6	7
Palliative	13	2	15.4%	6	1	2			1						1		
“Curative”	17	0		1	1	2			1	2	2	3	1	1	1	1	1

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IN MEMORIAM*

It becomes our sad duty to report the deaths in our Association since our last meeting. Not even the consolation of religion cover the sorrow or lessen the grief of those who are left when friends or loved ones pass through the gate called death. From time immemorial the thought of death has given rise to solemn thoughts, have challenged the manner of life for those who still continue in the body, and warned them to consider with care the value of the causes in which they are engaged.

It was a part of the original teachings, and it continues to be cherished in life that death is but the gate to a larger life, that our brief sojourn on the earth is not the main project but a training ground and a testing time to prepare us for the life to come. We anticipate for our friends and for ourselves happier engagements in fairer fields. We look upon death as a temporary separation from our present friends and loved ones, and we hold our own lives lightly where righteousness and truth are at stake.

Men are saved by faith and their good works. All men have their virtues. Of ourselves, even of our best selves, we are nothing. It is rather the love of God pressing into our hearts, molding our lives, that makes us worthy servants of the Most High. Like us, these friends who have passed from this life, depended upon God and he alone may judge them. He only may decide whether they made good use of the talents with which they were endowed. But they had their stations among us, and their place in our ranks, so it is for us the living to honor and pay tribute to their memory.

A. E. Baker	Charleston	Jan. 26, 1951
L. P. Barnes	Bennettsville	Nov. 18, 1950
D. A. Bigger	Rock Hill	Feb. 20, 1951
H. S. Black	Spartanburg	May 21, 1950
J. Walter Burn	Charleston	Dec. 25, 1950

F. L. Carpenter	Latta	Nov. 22, 1950
J. A. Dillard	Columbia	Nov. 30, 1950
James A. Dobson	Ridgeway	
R. G. Doughty	Columbia	Oct. 19, 1950
John W. Douglas, Sr.	Greenville	Jan. 3, 1951
H. A. Edwards	Latta	Feb. 8, 1951
J. A. Harper	Greenwood	July 17, 1950
J. W. Harter	Beaufort	June 17, 1950
W. R. Haynie, Sr.	Belton	
John B. Hill	Greenville	Oct. 8, 1950
T. B. Kell	Fort Lawn	May 31, 1950
E. H. King	Hartsville	Jan. 8, 1951
L. R. Kirkpatrick	Ware Shoals	Feb. 24, 1951
F. C. Ledbetter	Greenville	March 2, 1951
David M. Michaux	Dillon	June 1, 1950
James H. Moore	Whitmire	
Catherine N. Munro	Columbia	Oct. 8, 1950
James A. Norton	Conway	July 21, 1950
A. S. Pack	Greenville	Sept. 5, 1950
W. H. Poston	Pamplico	Nov. 6, 1950
John E. Rickenbacker	Cameron	Sept. 18, 1950
A. E. Shaw	Columbia	Feb. 8, 1951
Charles B. Skinner	Hartsville	Jan. 3, 1951
Robert B. Taft	Charleston	April 16, 1951
S. W. Talbert	Columbia	Aug. 27, 1951
J. V. Tate	Calhoun Falls	Feb. 6, 1951
J. C. Von Lehe	Walterboro	Aug. 2, 1950
J. P. Williamson	Ware Shoals	Feb. 2, 1951
Perry Workman	Lynan	Dec. 19, 1950
John P. Young	North Charleston	Nov. 3, 1950

Almighty God we remember before Thee this day, the thirty-four faithful members of this Association who have departed this life since our last meeting. And we pray Thee that having opened unto them the gates of a larger life, Thou wilt receive them more and more into Thy joyful service, that they may win with Thee and Thy faithful sons everywhere, the eternal victory, through God our Lord and Savior. Amen

* (Presented by Memorial Committee, Annual Session, 1951)

THE PRESIDENT'S PAGE

In last month's issue of *The Journal*, as a part of the minutes of The House of Delegates, there appeared the report of Dr. Roderick MacDonald's committee on the establishment of a grievance committee by our Association. That report represents a tremendous amount of study and much serious thought. Its adoption by the 1951 House of Delegates was recommended by the Council. However, consideration was postponed until the 1952 session because of the fact that the report was too voluminous and the system proposed appeared to be too complicated to allow intelligent consideration of it after a single reading. It is my opinion that postponement was wise. Its adoption would have been an amendment to the By-Laws, but that fact did not require its postponement. However, every proposed change in Constitution and By-Laws should be understood by members of the House. The proposal should be made in proper form, stating the changes proposed and how the section or by-law would read after the proposed amendment. Every delegate and every member of the Association, if he so desires, should have an opportunity to discuss the proposed change.

This kind of consideration of important matters cannot be had under our present system of transacting business. Either proposals have to be acted upon at once or else be carried over for a year. To allow full discussion, the House would, of necessity, have to sit actually, or in effect, as a committee of the whole, and to do so would require so much time that all business could be transacted in the time allowed. Further, as a thoughtful doctor, not a member of the House, put it, "No important business should be transacted, without first sleeping on it."

This matter of the establishment of a grievance committee demonstrates the need for changes in the manner of conducting the business of the House of Delegates, along the lines which I have suggested. I have suggested that all important business be re-

quired to be presented in writing; that the meeting of the House be divided into two sessions, one in which to receive important proposals and a second in which to act on the proposals; that the proposals presented be referred to reference committees, and that these committees hold open hearings on matters referred to them during the interim between the two meetings, and that they prepare and present reports on matters considered and recommend action to be taken. Such a system would result in more careful consideration of important matters, with better understanding of their import, and more general satisfaction with the action taken.

Coming back to the matter of establishment of a grievance committee, a careful reading of Dr. MacDonald's report, which I hope you will do, will reveal that while on the surface it appears to be complicated, it is really not so. It has been carefully prepared in legal language, so as to safeguard the doctor against whom a complaint might be offered, as well as to prevent unwise publicity of the complaint itself. What it really provides for is: Any person, whether colleague or layman, who feels that he has been treated unjustly by a member of the Association, may file a complaint with the committee. A private hearing will then be held, at which both the doctor against whom the complaint has been made and the person making the complaint will be heard, and an effort will be made to settle the difference to the satisfaction of both. The whole matter will be handled with secrecy, kindness, and in a judicial manner. Thirty-five state associations already have such committees, and they are proving their worth to the doctors and are improving public relations. Their history has been that at first, there are relatively numerous complaints filed, and then when the public learns that they really will be heard, the number of complaints rapidly decreases to almost nil.

J. Decherd Guess, M. D.

The Journal of the South Carolina Medical Association

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Florence, S. C.

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8½ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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SEPTEMBER, 1951

WORD OF THANKS

The following letter received by our treasurer is self-explanatory and we publish it with pride:

Dr. J. Howard Stokes, Treasurer
South Carolina Medical Association

Dear Doctor Stokes:

On behalf of the Directors of the American Medical Education Foundation, I wish to thank the South Carolina Medical Association for its check for \$10,000 as a contribution to the American Medical Education Foundation. As requested by the Association, this contribution will be earmarked for the Medical College of the State of South Carolina.

This contribution has been a source of great encouragement and inspiration to the Directors of the Foundation and to all others who are working to make the undertaking a success.

Sincerely yours,
Donald G. Anderson, M. D.
Secretary-Treasurer

PIEDMONT POST-GRADUATE CLINICAL ASSEMBLY

The sixteenth annual meeting of the Piedmont Post-Graduate Clinical Assembly will be held at the Anderson Memorial Hospital on Wednesday and Thursday, September 19 and 20. An outstanding program has been prepared with the following out-of-state speakers scheduled for papers: Dr. Fred Klenner, Reidsville, N. C.; Dr. David F. James, Atlanta, Ga.; Dr. Wm. Kiser, Atlanta, Ga.; Dr. Mims Gage, New Orleans, La.; Dr. Philip K. Bondy, Atlanta, Ga.; and Dr. Edgar Fincher, Atlanta, Ga.

Again we wish to congratulate those in charge for the splendid work which is being done through this Assembly. It is our hope that the number who attend and the attention which is given to the speakers will justify the efforts of those who have developed this year's program.

ANNUAL DUES

We recently received a study which had been made of annual dues for state medical associations throughout the country, and we are presenting some of the data as a matter of information:

The average dues for state medical associations are \$29.00 per year. The highest are \$50.00, the lowest \$5.00.

In most states the state dues are collected through the treasurers of local societies.

In most states the physician joins his state society when he enters his county society.

The average percentage of eligible physicians in the states who are members of the state associations is 86%.

SOUTH CAROLINA HEART ASSOCIATION CLINICS

The South Carolina Heart Association maintains seven heart clinics in various cities of the state, each clinic being under the direction of an internist with special interest in heart disease. The purpose of these clinics is to offer consultative services to physicians both locally and in nearby counties for their indigent patients with heart disease. They are not designed to serve patients who can pay a specialist's regular fee.

All the clinics operate on an appointment system, and appointments should be made by writing to the director of the nearest clinic. Either accompanying this letter, or brought by the patient, should be a statement by the county welfare agency certifying the patient's inability to pay. Most of the hospitals in which the clinics operate will make a nominal charge for each patient visit.

A list of the clinics follows, with the name of the director and the fee charged per patient visit:

Columbia—Columbia Hospital—Dr. A. I. Josey—First visit \$1.00, thereafter 50¢.

Union—Wallace Thompson Hospital—Dr. Paul Switzer, Jr.—\$1.00 per visit for out-of-county patients.

No charge for Union County patients.

Spartanburg—Spartanburg General Hospital—Dr.

Wm. J. Nelson—No charge for out-patients.
 Greenville—Greenville General Hospital—Dr. Robt.
 R. Stanley—25¢ per visit.
 Conway—Horry County Hospital—Dr. R. Catheart
 Smith—\$1.00 for first visit, 50¢ thereafter.
 Sumter—Tuomey Hospital—Dr. C. H. White—25¢
 per visit.
 Charleston—Medical College Clinic—Dr. J. A. Boone
 —Depending on income, free to \$2.00 per visit ac-
 cording to social service evaluation of ability to
 pay.

The Charleston clinic has been set up as a center for the entire state for the evaluation and treatment of patients with congenital or rheumatic heart disease who are thought to be candidates for possible surgical treatment. For such patients who are unable to pay, the South Carolina Heart Association pays the necessary expenses for hospitalization at Roper Hospital for diagnosis and for surgery if indicated.

REHABILITATION

In response to a request for information, Dr. G. S. T. Peebles of the State Board of Health has furnished us with a list of the tax supported institutions or agencies rendering services in the field of rehabilitation. We publish this for the information of our readers:

1. Vocational Rehabilitation — jointly sponsored by the State Department of Education and the State Board of Health—any patient over 16 years of age with a chronic remediable condition is eligible for relief under this program.
2. Rehabilitation of the Blind—Sponsored by the State Department of Public Welfare.
3. Rehabilitation of the Hard of Hearing—Sponsored by the State Department of Education.
4. Rehabilitation of the Cerebral Palsied—Sponsored jointly by the State Department of Education and the State Board of Health (Listed in the appropriation bill as "Speech Therapy").
5. Aid to Crippled Children (including the S. C. Convalescent Home for Crippled Children)—Sponsored by the State Board of Health, for patients up to the age of 21.
6. Rehabilitation Program at S. C. State Hospital, including Mental Health Program, with clinics at Spartanburg and Charleston.
7. Rehabilitation Program at the S. C. Tuberculosis Sanatorium.
8. Rehabilitation Programs of all penal institutions.
9. The S. C. School for the Deaf and Blind at Cedar Springs, S. C.
10. The John de La Howe School for normal dependent children of the State.
11. The State Training School for the Feeble Minded.
12. The Rheumatic Fever Program, sponsored by the State Board of Health, for patients up to the age of 21 years.
13. The Dental Health Program, sponsored by the State Board of Health.

CIVILIAN MEDICAL CARE FOR ARMY PERSONNEL

(The following information has been received from the Office of the Surgeon General of the Army and outlines the current policy on authorization and payment for civilian medical care rendered to Army personnel while on approved leave or duty status in vicinities where Federal hospital facilities are not available).

One of the most important and necessary services furnished the American soldier is adequate and timely medical care and treatment, including hospitalization. This service is provided for Army personnel in the United States generally by dispensaries, infirmaries, and hospitals located at the many Army installations throughout the country. There are many locations, however, where Army or other United States federal medical treatment facilities are not available when medical service is required by Army personnel. In cases of this nature, the services of civilian physicians, clinics, and hospitals are necessary. With the expansion of the Army and the deployment of Army personnel to practically all points in the United States either on a duty, travel, or leave status, the continued cooperation of civilian physicians and agencies is of utmost importance in providing adequate medical service to the U. S. soldier in time of need.

Certain criteria and procedures have been established in connection with the furnishing of medical service to Army personnel by civilians in accordance with the current laws and regulations. These criteria define the conditions under which individuals of the Army may be authorized civilian medical care at the expense of the Army. These procedures include methods for reporting and receiving payment for treatment or hospitalization of Army personnel by civilian medical agencies.

Civilian medical care (other than elective) at the expense of the Army is authorized for commissioned officers, contract surgeons when employed by the Army on a full-time basis, warrant officers, enlisted personnel, cadets of the United States Military Academy, general prisoners and prisoners of war when these personnel are on a duty status or when they are absent from their place of duty, on leave or informal leave (pass) status. Applicants for enlistment in the Army and selectees also are authorized necessary civilian medical care at the expense of Army funds while they are being processed for enlistment or induction into the Army. Payment for civilian medical expenses incurred by Army personnel who are absent without leave is not authorized. Any obligations resulting from civilian medical care to Army personnel who are absent without leave are the responsibility of the Army individual concerned.

Normally, civilian medical care for Army personnel is authorized only when there are no other federal medical treatment facilities available. First aid or emergency treatment is authorized at any time, notwithstanding the proximity of Army or other federal medical treatment facilities. In this connection, emer-

gency medical care may be defined as that required to save life, limb, or prevent great suffering. Surgical operations should not be performed without prior approval of military authorities, unless indicated as an emergency procedure. Elective medical treatment in civilian medical treatment facilities or by civilian physicians will not be authorized as Army funds cannot be used for payment of these services.

Due to limitation of funds available to the Army, medical care of dependents of military personnel from civilian sources, at Army expense, is *not* authorized. Dependents of military personnel may obtain available medical care at Department of Defense medical facilities only. Any obligations resulting from civilian medical care to dependents of military personnel are the responsibility of the dependents concerned or their sponsors.

As a general rule, local military commanders will furnish the civilian medical agency with prior written authority for ordinary medical care to Army personnel under his jurisdiction. In such cases, prior arrangements with the civilian medical agency will be made by the individual or by a proper military authority. For emergency cases treated without prior written authorization, the surgeon of the nearest military command should immediately be notified by the civilian medical agency, giving the individual's name, organization, nature of illness or injury and statement of the practicability of transfer of the patient to an Army or other governmental hospital. The civilian agency or physician then will be advised without delay by the appropriate military authorities as to procedures to be followed.

Bills for authorized medical care and treatment of Army personnel should be submitted to the commanding officer of the organization to which the patient belongs, or to the military authority who provided the authorization for the medical service. If the location of these individuals is not readily known or if such military commanders authorizing treatment

have moved to another station, the bill should be sent to the military authorities listed below.

For Services Rendered in the Following States:

THIRD ARMY AREA

Alabama
Florida
Georgia
Mississippi
North Carolina
South Carolina
Tennessee

Submit Bills to:

The Surgeon
Third Army
Fort McPherson, Ga.

The bill should show the full name, rank, and service number of the patient, place, and inclusive dates of treatment, diagnosis, and charges, all itemized separately. The duty status of the patient at the time of illness or injury also should be shown, such as duty, leave, or pass. Payment will be expedited if the following certificate is typed on the bill and signed:

"I certify that the above charges are correct and just; that payment therefor has not been received; that the services were necessary in the care and treatment of the person named above; that the services were rendered as stated; and that the charges do not exceed those customarily charged in this vicinity."

(Signature of Payee)

(Title or Capacity)

Answers to specific questions or further information concerning this matter may be requested of the military surgeon at the above address or from The Surgeon General, Department of the Army, Washington 25, D. C. Any difficulties that are experienced should be called to the attention of these Army authorities in order that this program may function smoothly and render the American soldier the prompt and adequate care and treatment to which he is entitled.

COMMITTEE APPOINTMENTS, 1951-1952 SOUTH CAROLINA MEDICAL ASSOCIATION

Committee on Legislation and Public Policy

Dr. William C. Cantey, Columbia, Chairman
Dr. Ralph E. Brown, Barnwell
Dr. Robert D. Hicks, Bishopville
Dr. J. Decherd Guess, Greenville, President, *Ex Officio*
Dr. N. B. Heyward, Columbia, Secretary, *Ex Officio*
Mr. M. L. Meadors, Florence, Business Manager and

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Dr. George R. Blalock, Clinton

Dr. Charles G. Spivey, Columbia
Dr. James L. Hughes, Greer
Dr. Joseph A. Johnson, Marion

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Dr. J. Howard Stokes, Florence
Dr. Lane E. Mays, Seneca

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Dr. J. L. Anderson, Greenville

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 Dr. Allen H. Johnson, Hemingway
 Dr. Clay W. Evatt, Charleston
 Dr. W. A. Woodruff, Woodruff
 Dr. R. L. Sanders, Columbia
 Mr. M. L. Meadors, Florence, Business Manager and
 Director of Public Relations, *Ex Officio*

Standing Committee on Infant Mortality

Dr. J. I. Waring, Charleston, Chairman, (Pediatric
 Society), to serve 2 years.
 Dr. Benton Burns, Sumter, (Pediatric Society), to
 serve 1 year.
 Dr. Keith Sanders, Kingstree, (Academy of General
 Practice), to serve 1 year.

Committee on Arrangements

Mr. M. L. Meadors, Florence, Business Manager and
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 Dr. O. B. Mayer, Columbia, Chairman of Council
 Dr. J. Decherd Guess, Greenville, President
 Dr. Lawrence P. Thackston, Orangeburg, President-
 Elect
 Dr. N. B. Heyward, Columbia, Secretary
 Dr. James A. Sasser, Conway

Committee on Maternal Welfare

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 Dr. Robert L. Crawford, Lancaster (Supernumerary)

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 Dr. John M. Fleming, Spartanburg
 Dr. Caine E. Cannon, Pickens

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 Dr. Edgar N. Sullivan, Clinton
 Dr. Richard C. Horger, Orangeburg
 Dr. Hervey W. Mead, Columbia, (Academy of Gen-
 eral Practice), to serve 2 years.
 Dr. Manly Hutchinson, Columbia, (South Carolina
 Obstetrical and Gynecological Society), to serve 2
 years.

*Committees Continued for Another Year**Committee on Industrial Medical Fee Schedule*

Dr. Frank C. Owens, Columbia, Chairman
 Dr. Charles N. Wyatt, Greenville
 Dr. W. S. Judy, Greenville
 Dr. Henry F. Hall, Columbia
 Dr. John K. Webb, Greenville

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 Dr. J. B. Floyd, Winnsboro
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 Sixth Judicial District
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Tenth Judicial District
Oconee, Anderson

Dr. T. R. Gaines, Anderson
Eleventh Judicial District
McCormick, Edgefield, Saluda, Lexington

Dr. W. W. King, Batesburg
Twelfth Judicial District

Florence, Marion, Horry, Georgetown

Dr. F. On Weston, Mullins

Thirteenth Judicial District
Greenville, Pickens

Dr. W. W. Edwards, Greenville

Fourteenth Judicial District

Colleton, Hampton, Jasper, Beaufort, Allendale

Dr. G. C. Brown, Jr., Walterboro

Ex Officio

Dr. J. Decherd Guess, President, Greenville

Dr. N. B. Heyward, Secretary, Columbia

Mr. M. L. Meadors, Business Manager and Director of
Public Relations, Florence

Special Committees

Special Committee appointed to work in cooperation with a committee of the South Carolina Chapter of the Academy of General Practice, Dr. Wyman King, Batesburg, Chairman, which shall seek ways and

means to secure establishment of a State Hospital for Chronic Alcoholics, under the direction of the Staff of the State Hospital for the Insane:

Dr. D. C. Alford, Spartanburg, Chairman

Dr. Ben N. Miller, Columbia

Dr. John M. Pratt, York

Special Committee on Constitution and By-Laws to revise or rewrite Constitution and By-Laws, incorporating amendments and unwritten changes and customs and to delete provisions no longer applicable, and to report at the 1952 meeting of the House of Delegates:

Dr. Julian P. Price, Florence, Chairman

Dr. N. B. Heyward, Columbia

Dr. O. B. Mayer, Columbia

Mr. M. L. Meadors, Florence (As Counsel)

Dr. J. Decherd Guess, President, Greenville, *Ex Officio*

Committee to inquire into the advisability of establishing and to study the procedure which should govern the operation of a medical examiners system in South Carolina for the purpose of investigating deaths from violent or unknown causes, etc.:

Dr. Strother Pope, Columbia, Chairman

Dr. J. K. Webb, Greenville

Dr. Wells Brabham, Orangeburg

Dr. H. R. Pratt-Thomas

Dr. Rowland Zeigler, Florence

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

A CLERGYMAN VIEWS MEDICINE*

It is a refreshing sign of the times that you invite a clergyman to offer his contribution to the deliberations of today's medical conference.

As the Chairman has said, the priest and the doctor, the clergyman and the physician have many points of contact and of mutual interest. When moral guidance breaks down, when I fail to make my teaching effective, then my wayward sheep turn to you for sedatives, for "shots" and for relief from the allergies to their own wild oats.

Conversely, and as a kind of professional courtesy, I maintain a discreet silence as I stand by the graves of your incomplete diagnoses.

On the other hand, you and I have inevitable and friendly tensions between us. A doctor sweats for days on end; he keeps virgils for long waking nights. Finally the patient pulls through. He becomes conscious, and the hospital chaplain tells him—"Thank God."

* (Address of Bishop John J. Wright before the Conference of Presidents and Other Officers of State Medical Associations, Atlantic City, June 10, 1951).

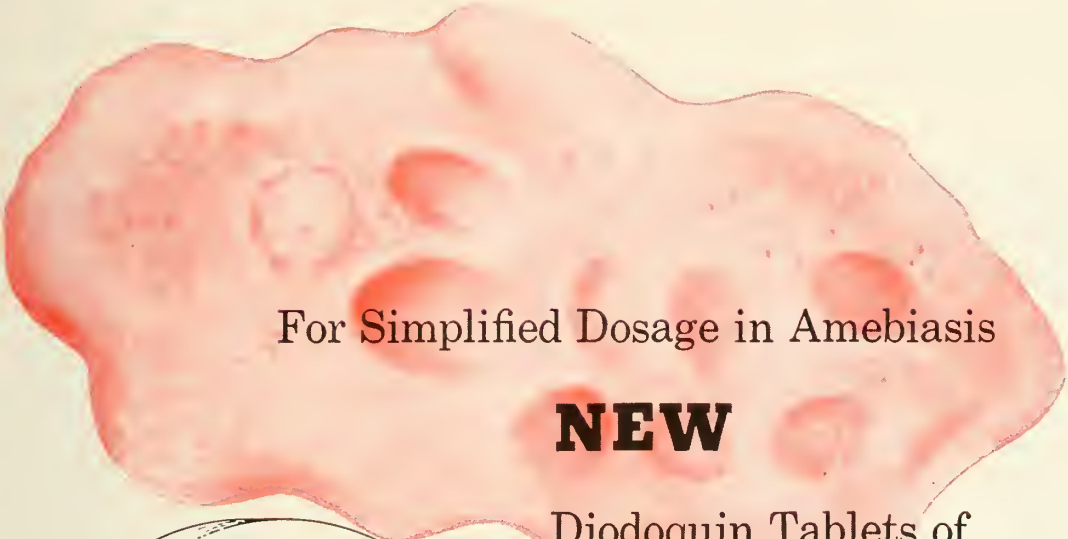
Yet, the Italians have a proverb—"God cures you and the doctor sends the bill."

The occasional tensions between the priest and the doctor, the prophet and the scientist, have other and more deep roots, however.

The technician, the scientist, the research man, the doctor—these are the masters of know-how. The prophet, the poet, the priest—these are the exponents of know-why. One group is concerned with proximates; the other is concerned with purposes. Each is indispensable ultimately to the other; both are sensitive to each other, sometimes even allergic.

Civilization depends on the happy blending of the contributions of the two. In some moments of civilization, know-why predominates. Such periods are times of great dreams, great mystics, great cathedral builders, great contemplatives, great peace.

The late Dr. James J. Walsh used to point out, in connection with the Thirteenth Century, something which was confirmed by an investigation at Harvard, of all places. In 1937 the Harvard Department of Sociology announced it as a fact that the average man of the Thirteenth Century had six thousand, five hundred more chances to die peacefully in bed and of



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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

natural causes than has any member of the Twentieth Century. This is worth thinking about, particularly if you have any hopes of dying in bed. The average man of the Thirteenth Century, the period when the ideas of the mystic, the poet and the priest tended to dominate culture and civilization, the average man had six thousand five hundred more chances to die peacefully in bed than has his descendant in the Twentieth Century. That was a know-why period of civilization.

Other periods of civilization are periods of know-how. The first half of the present century, for example, has been largely a know-how period of civilization, a time of extraordinary mechanical, technological, scientific and material advances, reaching their absurd development in the age of the "gadget."

I hope it is not unfair to hope that know-how has presumably reached its peak in the A-bomb, or unjust to suggest that it has gone to seed in the "gadget" civilization which is now upon us, a civilization which produces in its citizens the pathological condition Dr. John Fallon, of Worcester, describes as "gadget-tarrhea": "A disease characterized by the inordinate desire to make something useful, preferably from junk."

In more dignified terms, this instinct sometimes passes for the scientific spirit—an excess of which, even in medicine, is unhealthy.

So, the Thirteenth Century belonged to the mystics. The first half of this century has belonged to the scientists. Perhaps there is a good chance that the last half (please God, all the future) will belong to both—to mystics with their feet on the ground and to scientists with their eyes on heaven.

Reaction Against Scientism

The reaction against scientism, against mere technology, against mere know-how, has not been limited to the friendly or the critical laymen. It has been manifest in the medical profession itself.

For instance, I find in the *New England Journal of Medicine* for November 2nd, 1950, some exceedingly healthy remarks under the heading "Medicine, Science and Humanism," from which permit me to quote:

"Sir Henry Cohen, professor of medicine at the University of Liverpool, delivered the presidential address before the British Medical Association this year on 'Medicine, Science, and Humanism.' These subjects and the homilies that can be based on their relations to each other are hardly new, but they are of recurring value; like the characteristic signals of a lighthouse they must be repeated at regular intervals if the purpose for which they are intended is to be served.

"Looking back, as it is the fashion of the year to do, on the gains and losses of a half century, Sir Henry finds that the changing order of medical training, research and practice has been the result of two main influences—the rapid expansion of knowledge and technical skills in the sciences, and the evolution of the profession's ideas of social responsibility. At the

beginning of the period, he notes, man was still regarded as a member of a family and of society, 'greater than the sum of his parts.'

"The advance of science to the point where a scientific age might be labelled as such placed this attitude in jeopardy. It made the physician too often forget not only 'the essential humanity,' but that science is not an end in itself. Scientific achievements had not been lacking since the Renaissance began—but now science became all important and tended to crowd out the humanism without which the most perfect mind and body seem yet to lack a soul."

But it is not enough to focus our attention on the priest and the doctor, the prophet and the technician in society. There is yet another gentleman with whom both must sooner or later come to terms. That third party is the king—whether he wears a crown or a straw hat. And so, whether we talk of the civilization of the Thirteenth Century, or of scientific civilizations such as that of the early part of the Twentieth Century, all civilization works itself out within the framework of a political order, of the political state. The problems of each civilization tend to be political problems. In the age of the mystic, the Thirteenth Century, it was the conflict of Church and the State, the conflict between the Emperor and the Pope.

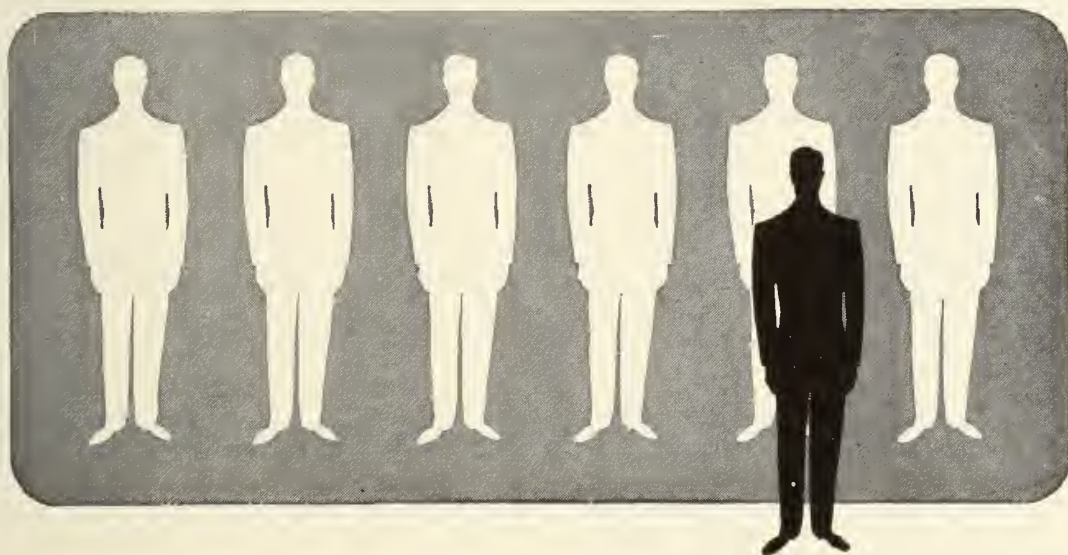
In our age it is more often than not the problem of the conflict between the King and the professional man, and the increasing effort of the former to regiment the latter. In the age of the mystic, it was the fight over the right of investiture, the struggle between the bishop and the temporal princes. In this age, it has become the fight between the politicians and the doctors, and the politicians and the press, the politicians and business.

So, the proximate problems of every period of civilization are political, although as General MacArthur remarked upon a time when it was more easy for him to make remarks, "The ultimate problems of our age are theological." So it always is:—the ultimate difficulties of every generation are theological. The proximate difficulties are political. That is true no matter what the form of the political order.

In each political system, the poets, priests, professional men and scientists have to come to working terms with the realities of the existing political order. There is always the danger that they may forfeit too much in this process. We could apply to doctors, for example, the point that is applied so frequently to laborers, to workers.

Four workers were sailing in a boat when suddenly a gust of wind tipped it over. It quickly sank. The four men were respectively a Fascist, a Communist, a Capitalist and a Socialist Trade Unionist. The Capitalist drowned first; he tried to hold on to too many of his belongings and couldn't make more than a few yards. The next to drown was the Fascist; he kept raising his arm in a stiff salute and so impeded his swimming. The third to drown was the Communist; he was so busy shouting propaganda that his face

In one out of six patients



no symptoms

but *all* 34 patients in this study carried *Endamoeba histolytica*¹ in their stools! Five were classified as asymptomatic and 18 were "persons with such poorly defined symptoms that they would not normally seek medical assistance..." but a stool examination proved that all had amebic dysentery.

In these instances, a course of treatment with Milibis-Aralen was completely successful. Milibis — bismuth glycolylarsanilate — a new intestinal amebicide, is one of the most powerful of the drugs commonly used

against *Endamoeba histolytica*.² Yet its toxicity is so low that side effects are virtually unobserved.

Aralen (chloroquine) diphosphate has been shown to exert a specific action on extra-intestinal amebiasis. The combination of Aralen with a superior intestinal antiamebic drug such as Milibis furnishes adequate treatment of any amebic infection.

HOW SUPPLIED:

Milibis, tablets of 0.5 Gm., bottles of 25;
Aralen, tablets of 0.25 Gm., bottles of 100.

MILIBIS[®] *amebicide... high in potency... low in side effects*

ARALEN[®] *diphosphate... for extra-intestinal amebiasis*



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1. Towse, R. C., Berberian, D. A., and Dennis, E. W.: *New York State Jour. Med.*, 50:2035, Sept., 1950.
2. Berberian, D. A., Dennis, E. W., and Pipkin, C. A.: *Am. Jour. Trop. Med.*, 30:613, Sept., 1950.

filled with water. Last was the Socialist Trade Unionist; he was swimming along very well until he heard a whistle blow. Then he quit swimming and sank.

So each tends to come to terms with the political system of his age and sooner or later the political system tends to prove his undoing.

Vigilance Necessary for Free Professions

In an age of socialism and collectivism, such as ours has become, there is need for great vigilance if you are to keep the profession free. Medicine is in particularly grave danger of enslavement by absorption into the bureaucratic machinery of the socialist state because your profession is susceptible to the fallacies of the eugenic state. The eugenic state is simply another aspect of the socialist state, as socialism is simply one form of the collectivist or totalitarian state.

You see, the names used in politics are largely a question of salesmanship. The totalitarian chooses his vocabulary according to the prejudices and the preoccupations of the group that he is attempting to "sell." If he is talking to Trade Unionists, he speaks in the economic terms of socialism. If he is talking to doctors, he uses the medical jargon of the eugenic state. In both cases, he is "selling" the despotism of the slave state.

Your particular danger stems from the fact that in the fallacies of the eugenic state, as in all fallacies, there is a certain show of truth.

Health is a concern of the state. Health is an aspect of the common good. The state has for its object the protection of that good. And so, medicine does serve the state, very definitely. Hence the eugenicist and the Socialist are able to weave a highly plausible case for the political control of medicine.

Claims of State on Profession

Now, medicine does serve the state, and, as a consequence, the state has very real claims on the profession. However, the nature, or rather, the manner of those claims must be gauged from the manner of the service. The profession serves the state by indirection; it promotes the common good indirectly, save in the case of specialized problems of a specific kind. The direct service of the profession is to the *individual*, to the person, and in the scheme of things still ours by lip service at least, the individual person is accounted a free man.

Civilization has always accorded the doctor, like the priest, a wholesome maximum immunity from civil and political controls in his service of the free man. Even the ancient Greeks drew a sharp distinction between the service of the free man and the service of the slave.

The Greek writer, Lucian, for example, who lived in the Second Century, makes a physician say in one of his dialogues: "In the case of the medical profession, the more distinguished it is and the more serviceable to the world, the more unrestricted it should be

for those who practice it. It is only just that the art of healing should carry with it some privilege in respect to the liberty of practicing it, and that it should not be subject to enslavement by the law."

In a word, the art of healing serves directly and principally the person, not the state, and thus indirectly it builds up, as do all other arts, that common good which is the state's legitimate concern—a common good which the state itself destroys, however, the more it de-personalizes it, the more that good becomes "collectivized."

The "common good" is not the same as a "collective good." It is one thing for me to hold certain benefits in common with you. It is quite another for you and I to be the beneficiaries of a "collective benefit" which is neither yours nor mine.

The idea of "everything in the State, nothing outside the State," Mussolini's blunt but honest definition of Fascism, is by no means dead. The rose by any other name retains its special fragrance; but the same is true of the stinkweed. Fascism frankly talks of the mystical exaltation of the State; State Socialism sometimes talks a loud anti-Fascist "line"—but it remains "everything in the State, nothing outside the State."

When we hear talk of increased socialization of services to the *person* in order to increase economic democracy; when increased socialization of the professions is argued in terms of alleged "liberalism" and of resistance to Fascism, then it is time to meditate the cynical, but shrewd quip of Huey Long. Someone once asked Huey if Fascism would ever come to America. "Sure it will," said the Kingfish—"but when it does, we'll call it anti-Fascism!"

In an age of Socialism and Collectivism, such as ours tends to be, there is need, I repeat, for great vigilance if you are to keep the profession free.

Freedom of the Individual

But if it be true—and it is true—that the political freedom of the profession derives from its privileged relation to the free person, then it is pertinent and important to point out why the person is free—by what title the person eludes the pretension of the State and retains his freedom, his right to service and consideration independent of the State.

If medicine serves the person and owes its own dignity and freedom to the intimacy of that service, then the doctor should possess an appreciation of the spiritual nature of complete personality, an appreciation hardly less than that of the priest.

Such an appreciation will include a recognition of the moral climate as well as the material environment in which personality achieves its healthy development; it will include an acknowledgement of the spiritual as well as physical elements of the total human person. There are grounds for complaint that this well-rounded appreciation is not always as present or as honest as it might be, with respect to either the moral or the spiritual order.

It is here, of course, that the priest is in danger of



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Take a PHILIP MORRIS—and *any* other cigarette. Then,

1. Light up either one. Take a puff — don't inhale — and s-l-o-w-l-y let the smoke come through your nose.

2. Now do exactly the same thing with the other cigarette.



Then, Doctor, *BELIEVE IN YOURSELF!*

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degenerating into the common scold—but it is also here that his responsibility begins, a responsibility in the conscientious discharge of which he well serves both the medical profession and the democratic community.

The treatment of social disease offers the most obvious, but by no means the only example of the truth that medical treatment on the material level alone, scientific techniques without reference to moral considerations, are far from sufficient for the adequate protection or improvement of persons. Obviously here, less obviously but no less truly elsewhere, the problem is not purely scientific—and neither can the solution be.

In "Social Medicine" a publication of the New York Academy of Medicine, I read this significant report:

"Not long ago health administrators thought that if only some excellent curative agent were available to treat venereal disease cases, the problem could be solved fairly promptly. Now penicillin is providing more satisfactory treatment than the most sanguine might have dared hope, and yet we find that instead of diminishing, the venereal disease rate is rising. Recently the venereal disease director of one of our best state health departments said that he is convinced that the problem is much broader than that of treatment alone. There must be a concerted assault on all aspects of the situation if effective control is to be secured. Treatment must be pushed as completely and carefully as possible. There must also be an attack by all community agencies which can help to remove conditions leading to promiscuity. Sex education must be improved and descent recreational opportunities made available. Home ties will have to be strengthened, prostitution repressed, and intensive efforts made to rehabilitate socially those now engaged in prostitution."

Now what a priest finds discouraging, what, as a matter of candid fact, he finds downright dishonest in this paragraph, as in the whole report, is the studious avoidance of the use of the word "moral." There is talk of "family relations," "prostitution," numerous other notions all involving morality, moral codes, moral judgements, moral relations, moral questions—but a careful omission of the word "moral." The omission is significant,—and it is also fatal, fatal not merely to morality, but, in final terms, to the work, prestige and interest of the medical profession itself.

"He strove to keep his arteries whole, and died of hardening of the soul!"

An even more grievous discouragement to the priest and disservice to the profession is had when preoccupation with the physical become exclusive, so that an insensibility to spiritual values and to the immoral factors of personality appears to paralyze certain members of the profession. Sometimes the insensibility reveals itself in a crude and vulgar fashion, the crudeness and vulgarity not being diminished by the eminence of the doctor who suffers from it.

A Soldier's Letter

I have been reading to other audiences a letter that a soldier sent home to his girl friend during the recent war. I beg leave to read it to you as a summary of the points I am striving to make. He was with the Medical Corps during the war, which explains the somewhat technical terms in which these two wrote to one another.

He wrote: "This afternoon I attended a medical staff meeting directed by Major X, an eminent pathologist, rather a good person when you get him alone. He performed an autopsy for us. Lieutenant So-and-so, of the Medical Corps, who had treated the case, read the background and the clinical history. I remember that he had discussed at table two weeks previously the question of there being a pons lesion or a disseminated sclerosis—and had correctly diagnosed it then.

"He commented on the various turns for better and for worse that the disease might have taken had the young man lived. He spoke of the partial paralyses that would come and go, the effect upon his face and jaw bone. He painted a beguiling picture of life in the postwar world, the world in which you and I will have our children if you still feel the same way about it.

"He told us the wonders that research had accomplished, the new techniques which were coming out of the science made necessary by war. He told us that by then a young man who contracted this same disease need not die of it. There would be means to anticipate it, control it, arrest it in its first beginnings. The young man now dead could, in that period, have an indefinite life expectancy of health and of service.

"It was a seductive picture, this picture of the scientific world in the making, until, when he completed its history, Major X took over again. In a black-board diagrammatic explanation, he traced the course of the tumor and accounted in detail for the varying phases of the patient's clinical history. After concluding his discussion of the cause, the factors, and the effects upon the brain, he discussed the other organs, one by one.

"This is what he said—'Splcen—markedly diseased—not unusual in case of brain tumor, but here is a tissue very largely invaded. Stomach—characterized by softening of some tissue, with accompanying self-digestion. This phenomenon scholarly discussed in an article in "Medicine" for October, 1940. Liver condition—healthy, Lungs—exhibiting marked pulmonary edema. . . Resultant disorganized function of other nerve centers. Heart indications—negative. Are there any questions? That's all there is to these fellows!'"

"That's All There Is To These Fellows"

Then this boy continued—"My God—In a single instant—in a careless phrase, the implications of which I am sure he would have denied had I pointed them out, this medical man articulated fears which have

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been in my heart ever since I joined the outfit, dreads for which I couldn't find the words. But he found them; there it was—heart indications—negative. Are there any questions, gentlemen? That's all there is to these fellows!

"All there was to him! All that went into his birth and being—the tears that were shed to conceive him, the hours spent watching for him; all of childhood's frets and frustrations; his young school days; his books, his brooks, fields, and fireside; the sights and sounds of home; all the angers of his adolescence that purified him; the joys of young manhood that made him sweet; friendships, loves—love of sweetheart, love of family, love of country—all the treasure of heart and hearth and home that breathed into him goodness, courage, faith and value,—six short hours before!

"All these now became 'heart indications, negative. Are there any questions, gentlemen? That's all there is to these fellows.'"

And the lad concluded—"Yes, Major X. I have some questions, but I am very much afraid that with all your learning and wisdom, your slides and microscopes, your research, your federal subsidies, and your laboratories,—you can't answer my questions. And I'm even more afraid that if you and those who share your spirit, have the full say in the writing of the curricula of the future and the planning of society, then a half century hence there won't be any who can answer my questions, and very few who will think it worth asking. But while there are some who live in the tradition of spiritual and humane values which produced me and those I love, I pose my question in a letter to a girl who came from the same tradition.

"This is it: What of that boy's love, Major? What of his dreams? What of his courage? What of the idealism that made him volunteer for the service in which he died, Major? Did they show up under your microscope? In your examination of the tear ducts of his dead eyes you found the cheap chemistry that enabled him to weep, but did you find the causes, the motives, of his tears? Did you find the things that made him bow his head at the name of Jesus—that made him genuflect before my eyes a few weeks ago in a French church—that made him step back with beautiful courtesy to let the aged and the less privileged go before him into buses? Into what slides do you peer, Major, when you are looking for goodness—for sorrow—for repentance—for fidelity—for generosity—all these things which have little to do with the condition of his spleen or his lungs but which made him so much more valuable to us in life than he is interesting to you on your dissecting table? Truly, in the face of these heart-hidden, eternal things, the medical scientist and every scientist will do as you have just done, Major, unless he goes beyond his laboratory. If he refuses to go beyond it, then he can only laugh it all off, saying—'heart indications, nega-

tive. Any questions, gentlemen? That's all there is to these fellows.'"

Religious Faith and Moral Law Paramount

Doctors—it can't be laughed off, either on religious or on professional grounds. We have said that in an age of statism—of socialism and collectivism—we must keep our eyes constantly on the notion of the person—the person medicine serves,—if the profession is to remain free. And that is true. But we may also say, we must also say, that in an age of materialism, secularism and scientism, we need to keep a clear vision of the truth by which men are made the sons of God,—or they cease to be free. They become slaves—and they drag down to servitude, all those who serve them,—first, and worst of all, their priests and their doctors.

You doctors should be the first to defend religious faith and to insist upon scrupulous observance of the moral law, for once the moral law is eclipsed your profession will sink fatally into the slavery which was the condition of physicians and teachers in the pre-Christian days of amoral totalitarianism.

If you doubt me, read the front pages of the daily papers.

IF YOUR A. M. A. JOURNAL IS MISSING

Recently the Executive Office of the Society has received a number of telephone calls from members asking the question "I haven't been receiving the J. A. M. A. for the last few weeks. I sent in my check for \$25 for A.M.A. dues on such-and-such a date. What has happened?"

Investigation reveals that these calls usually are from members who did not pay their 1950 A.M.A. dues by the deadline of December 31, 1950, and who have since sent in their checks for 1950 on say—January 15, 1951.

What has happened is quite simple. When the 1950 dues were not paid by the end of the year the doctor entered in the category of delinquent membership in the A.M.A. His name was removed from the roster of members and his name was removed from the list of those who receive the Journal of the A.M.A.

Such delinquent members will not be entered on the circulation list of the Journal of the A.M.A. until they have been reinstated to full membership. This means they must pay BOTH their 1950 and 1951 dues. If they have now paid their 1950 dues (after Jan. 1, 1951) they must also pay the 1951 dues before they enter status of members in good standing. Until then they will not receive the Journal.

Word direct from the A.M.A. is that members who paid their 1950 dues on time (before the end of the year 1950) are in good standing and have until the end of 1951 to pay their 1951 dues. They are considered as 'good circulation risks' and will continue to receive the Journal during 1951 even if they cannot pay their 1951 A.M.A. dues until later this year.

But members who did not pay their 1950 dues on time are now delinquent. They are not considered good circulation risks and the Journal will not be sent to them until they enjoy full reinstatement by paying both 1950 and 1951 dues.

It was explained in the circular which accompanied the bills for A.M.A. dues that both 1950 and 1951 dues must be paid. The penalty for those who did not read this, did not believe it, or did not act upon this advice is the penalty of not receiving the Journal of the A.M.A.

When a member pays his full dues and is reinstated in the A.M.A. his subscription to the Journal will start again. And the reinstated member can write directly to the Office of the J.A.M.A. and ask for back copies that he has missed.

We are informed that the Journal printed a number of extra copies of the early issues of 1951 to cover just this possibility. But the extra supply is limited and there can be no guarantee that the supply will not be exhausted.

To repeat the main point:

A.M.A. members who paid their 1950 dues during 1950 have no need to worry. Their J.A.M.A. will keep coming to them throughout the year. But they must pay their 1951 A.M.A. dues during 1951, quite naturally.

Members who have not paid their 1950 A.M.A. dues until after January 1, 1951 are temporarily NOT receiving the Journal and this is one of the penalties they pay for being delinquent.

Already a few calls have come from delinquent members who have now paid their 1950 and 1951 A.M.A. dues and cannot understand why they do not immediately receive the A.M.A. Journal the following week after they write their checks. To these physicians it may be of interest to know something of the process of reinstatement.

For example, thousands of checks from members come to the County Society for payment of A.M.A. dues. After opening the envelopes and sorting out the checks, the proper amounts must be entered upon individual treasurer's cards for the permanent records. Lists of names of members paying dues must be arranged in alphabetical order for the auditors. Each check must be stamped for deposit, and deposit slips filled out and rechecked again. The money for A.M.A. dues thus enters the bank to the account of the County Society.

All these operations, including still others, are simultaneously going to record the payments for County and State dues which are handled separately.

Following such activity at the level of the county society alphabetized lists of members who have paid their A.M.A. dues are sent to the Medical Society of the State of New York together with a check to cover payment of such dues. The State Society, in its turn, must enter the information on its cards, prepare audit



A MOST CORDIAL WELCOME awaits physicians of the South attending the Dallas meeting which will consist of forty-seven half-day sessions presented by the twenty-one sections embracing every phase of medical practice. In addition to these activities there will be two general sessions, the annual dinner of the association, and outstanding scientific and technical exhibits.

THE COMPLETENESS of the program and the excellence of the exhibits will again make this meeting of the Southern Medical Association the outstanding general medical meeting of the year for physicians of the South.

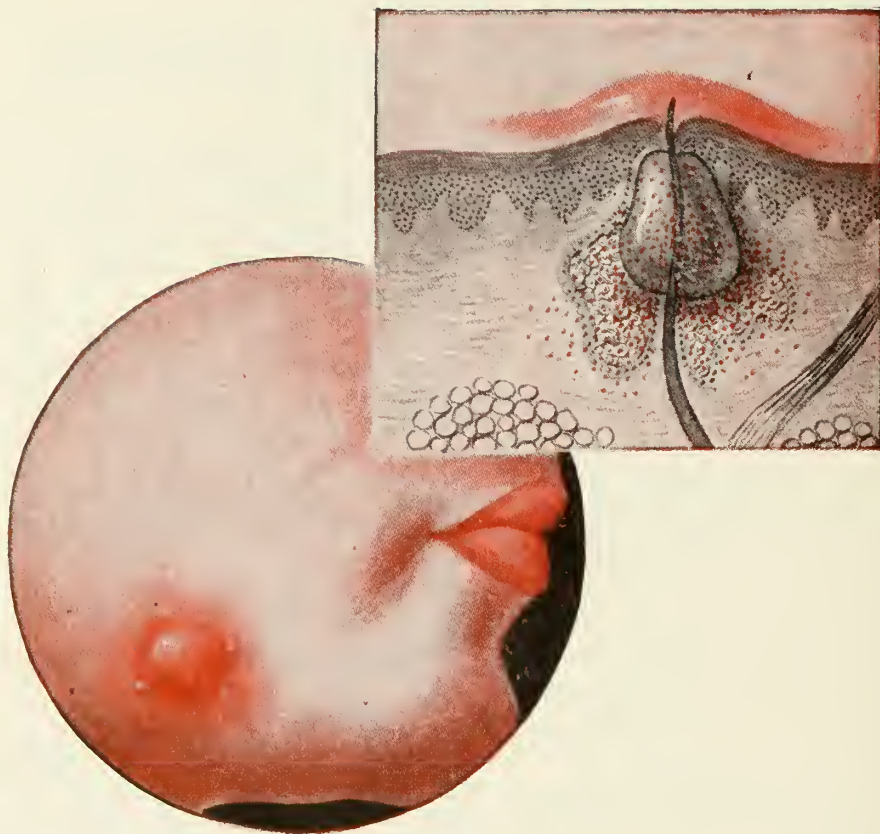
REGARDLESS of what any physician may be interested in, regardless of how general or how limited his interest, there will be at Dallas a program to challenge that interest and make it worthwhile for him to attend.

MEMBERS of state and county medical societies may attend. Eligible physicians, members of state and county medical societies in the South can be and should be members of the Southern Medical Association. The annual dues of \$10.00 include the Southern Medical Journal, a journal most valuable to physicians of the South, one that each should have on his reading table.

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In Soft-tissue Infections: "Terramycin was used in [101] soft-tissue infections and proved to be of great value... Where the terramycin was used intravenously with the proper diluent, no instance of chemical phlebitis occurred... Where surgical intervention was used in conjunction with terramycin, the decrease in morbidity was marked and noteworthy... That terramycin has a wide and useful area of great value in the treatment of soft-tissue infections is beyond question."

*Wright, L. T., et al.: Antibiotics and
Chemotherapy 1:165 (June) 1951.*

ANTIBIOTIC DIVISION



Terramycin is also indicated in a wide range of

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GRAM-POSITIVE BACTERIAL INFECTIONS

*Lobar pneumonia • Mixed bacterial pneumonias
Bacteremia and septicemia
Acute follicular tonsillitis
Septic sore throat • Pharyngitis
Acute and chronic otitis media
Acute bronchitis • Laryngotracheitis
Tracheobronchitis • Sinusitis
Chronic bronchiectasis
Pulmonary infections associated
with pancreatic insufficiency
Scarlet fever • Urinary tract infections
Acute and subacute purulent conjunctivitis
Acute catarrhal conjunctivitis
Chronic blepharoconjunctivitis
not involving the meibomian gland
Abscesses • Cellulitis
Furunculosis • Impetigo
Infections secondary to *Acne vulgaris*
Erysipelas • Peritonitis*

GRAM-NEGATIVE BACTERIAL INFECTIONS

*Gonorrhea • Brucellosis
Bacteremia and septicemia
Friedländer's pneumonia
Mixed bacterial pneumonias
Pertussis • Diffuse bronchopneumonia
Post-partum endometritis • Granuloma inguinale
Dysentery • Urinary tract infections
Respiratory tract infections
Cellulitis • Peritonitis • Tularemia*

SPIROCHETAL INFECTIONS

Syphilis • Yaws • Vincent's infection

RICKETTSIAL INFECTIONS

*Epidemic typhus • Murine typhus
Scrub typhus • Rickettsialpox
Q fever • Rocky Mountain spotted fever*

VIRAL INFECTIONS

*Primary atypical pneumonia (virus pneumonia)
Lymphogranuloma venereum • Trachoma*

PROTOZOAL INFECTIONS

Amebiasis

lists, make deposits and maintain its own set of records.

Next the State Society sends to the A.M.A. lists of members who have paid their A.M.A. dues and sends covering checks for each such list.

In its turn the A.M.A. must enter all information on its own cards and—along the way—notifies the A.M.A. Journal that member X, for example, is now in good standing. If member X's name has been removed from the mailing list of the J.A.M.A., because he was delinquent, a new addressograph plate must be prepared with his name and address so that labels can be printed to mail his magazine. Since these labels are prepared an issue or two ahead of mailing it thus takes several weeks to start the machinery flowing again at the Journal office.

All these steps—at the county level, at the state level, and at the national level—provide an explanation of why it is impossible to expect that as soon as a check is mailed to the N. Y. County Medical Society the Journal of the A.M.A. will arrive the next week.

(Reprinted from New York Medicine, official publication of the Medical Society of the County of New York, March 20, 1951.)

THE CLARK REPORT

Health insurance plans in the United States, the study of health insurance coverage compiled under the direction of Dr. Dean A. Clark, has been released by the Senate's Committee on Labor and Public Welfare. The report (in three parts) covers such categories as the Number of Persons Holding Insurance, Benefits, Costs, Medical Costs and Insurance Protection, Medical Care Insurance and the Industrial, Rural and Aged Population, and the Role of Medical Care Insurance. It also contains seven statements of cooperating organizations and a report of the activities of the Government in the field of health service. The Research Council for Economic Security, one of the organizations from which the Senate's Sub-Committee on Health requested information for the study and invited to attend the conferences of the survey staff, makes the following brief report of some of the principal findings of the Clark survey: 75 million people are insured in varying degrees by voluntary health plans . . . another 75 million are not covered by any form of medical care insurance. About half of the 75 million were insured in a Blue Cross plan . . . about 34 million were covered by insurance company policies . . . about 18 million of the 48 million who carried medical and surgical insurance of one type or another at the end of 1950 were covered by a Blue Shield plan; another 30 million held insurance company policies . . . over 21-1/2 million group and over 8 million individual.

Less than 3% of the population (between 3 and 4 million people) have comprehensive medical care in-

surance, including hospital, surgical and relatively complete medical care insurance . . . of the 9 to 10 billion dollars spent for medical care in 1949, about 8% or 755 million was paid through insurance . . . in addition to the 3 or 4 million persons covered by comprehensive plans, 17 million (11%) have hospital, surgical and limited medical insurance . . . about 31 million (21%) have some degree of protection against the cost of both hospital and surgical care . . . 23 million people (15%) carry hospital insurance only. The proportion of persons having hospital insurance is twice as high in high income as in low income states.

There is considerable variation among the different types of plans in the amount of premium paid which comes back to the subscriber in the form of benefits or dividends . . . the range is from 55 to 93 percent of the subscriber's dollar . . . Blue Cross reported an average retention charge of 15% in 1949, the Blue Shield 21%, and insurance companies estimate group policies at 20% and individual insurance at 45%.

DEATHS

WILSON CALDWELL BROWN

Dr. Wilson Caldwell Brown, 90, retired physician, died at his home near Newberry on July 1. He was the last surviving member of the Red Shirts.

A native of Newberry County, Dr. Brown received his education at Erskine College and the Medical College of South Carolina (Class of 1888). After ten years of medical practice, ill health forced him to retire from active practice and the remainder of his life was devoted to farming.

Dr. Brown is survived by two daughters.

SKOTTOWE BELLINGER FISHBURNE

Dr. S. B. Fishburne, prominent Columbia physician, died at the Veterans Hospital on July 8, at the age of seventy-six.

Dr. Fishburne received his education at Clemson College, the South Carolina College and the Medical College of South Carolina from which he was graduated in 1900. Following his graduation he practiced in Columbia for many years, also serving the city as health officer. He volunteered his services during World War I and served as a captain. After his discharge he was appointed an examiner for the Veterans Administration with which he was connected until his retirement in 1947.

Surviving Dr. Fishburne are his widow, a son and two daughters.

RALPH E. BROWN

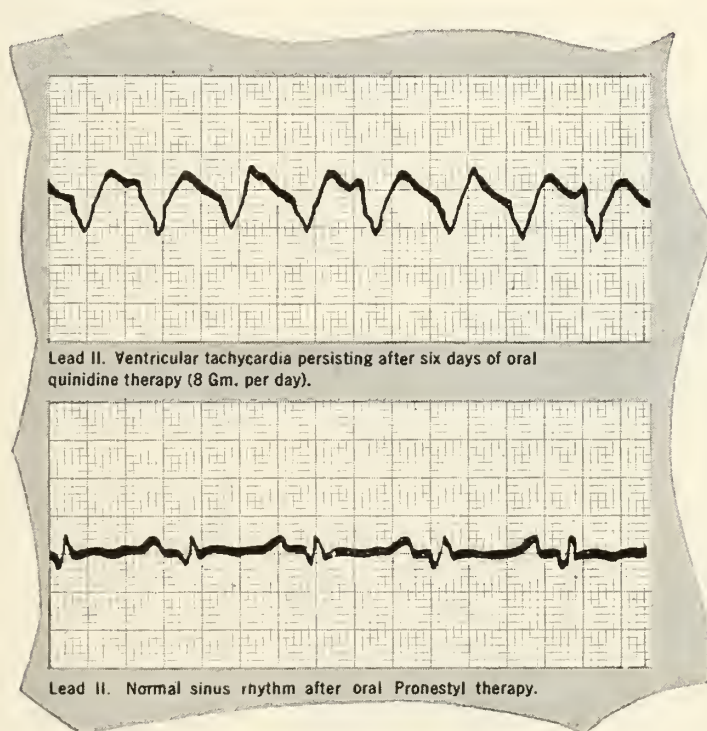
Dr. R. E. Brown of Barnwell, who had been in poor health for several years drowned at Savannah Beach on July 17. He was vacationing at the beach with his wife and two daughters at the time of his untimely death. The forty-seven year old physician moved to Barnwell from Gainesville, Ga., in 1935.

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Pronestyl Hydrochloride Solution, 100 mg. per cc., 10 cc. vials.

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WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. A. F. Burnside, Columbia, S. C.

Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.

"WHAT CAN I DO?"

This is a title taken from an article written by Bertrand Russel, the winner of the Nobel prize for Literature for the year 1950. It is a question that has many answers, answers that can cover unlimited discussion and that is why I have chosen it for my subject today. When I am speaking to one of my state auxiliaries I always endeavor to select a subject that is flexible as well as comprehensive.

There is so much that each of us can do and there are so many different phases of auxiliary work to be done that there must be some phase that is suited to the ability of each of us. I should like to mention a few of these and then leave it to you to decide which you feel you would enjoy doing and are most capable of doing.

Whether you are an Auxiliary member or not, you are still the wife of a physician and more or less in the limelight, and what you do and say will reflect for good or evil on your husband and on the medical profession as a whole. Edmund Burke said "All that is necessary for evil to win is for enough good men to do nothing." I know you do not want to be in this class.

It is important that as doctors' wives we develop a sense of individual responsibility and individual initiative. Before doing any constructive work, however, it is necessary that you have the facts regarding the issue and above all you must believe in what you are doing. Arthur Kroestler in the "Age of Longing" stresses this when he had Hydie, an emotional and unbalanced American girl whose father is a power in the American Embassy in Paris, think she is in love with Fedka Nikitin, a cultural ambassador from Moscow. Hydie feels that the reason she likes to be with Nikitin is because he believes in the monstrous theory that whatever the hierarchy in the Kremlin orders must be morally and intellectually right. In Mr. Kroestler's novel, thoughtful men in Paris are being paralyzed by fear of the unknown. Mr. Kroestler, in this powerful, complex, and terrifying novel, tries to make his readers realize that they must resist enslavement. I think he generally is successful. I do not suggest that you must be like Nikitin and accept and believe blindly in a program before you can handle it successfully, but I do feel that the cause for which you are working must seem right and important or you will not be successful. This fear of the unknown must not be allowed to paralyze us. The danger that confronts us today is very real, but dangers need to be faced by calm judgement not by hysteria. We must learn to help ourselves as well as others to learn to live *with* rather than *in* fear of the atomic bomb, for the threat to our security may be with us for a considerable time to come. The public must be educated with respect to the true potentials and limitations of atomic warfare, biologic and chemical warfare agents. Never before has there been a weapon that permits such an opportunity for exploiting the peoples' fear of the unknown. We must form groups to study Civil Defense so we can help ourselves as well as others overcome this deadly fear. In the March issue of your Bulletin is a copy of the address given by Dr. George Lyons at our November Conference. In it he makes

some valuable suggestions for us to follow as well as gives us the names of some books to use for study groups. Also, copies of "U. S. Civil Defense—Health Services and Special Weapons Defense" were sent by your National President to all State Presidents.

The legislation that is now being introduced and discussed in Congress has many angles and ramifications. It is necessary that all of you study what is happening in Washington. Your copies of Capitol Clinics, that this year, have been sent to every county president should be of great assistance to you. We need your interest and your participation in the efforts of our parent body to defeat legislation that would not conform to our beliefs and principles. Some very vicious legislation is being cleverly included in so called defense bills. It is just as important now as it was last year to cooperate with the National Education Committee. Resolutions are still paramount importance and should be sought by all auxiliaries whenever possible. Offer the study kits to groups such as A. A. U. W., P. T. A., of W. Voters, Nursing groups, and then follow through after they have been given an opportunity to study both sides. The National Meeting of the A. A. U. W. is now history, but, at that meeting, the following was put on their study agenda: "Noting the current interest and concern as to the proper method of securing adequate health protection and medical care, we shall undertake the earnest and thorough study of all proposed plans for health insurance with the object of reaching an informed opinion." This should make you realize how important it is that we put the right type of information into the hands of the various local branches of A. A. U. W. Do not be a pressure group but also do not adopt a defeatist attitude, for if you do you will meet with defeat.

One of our best talking points is, of course, Voluntary Health Insurance plans. Voluntary Health Insurance plans have made remarkable progress in the last four or five years, but so few people are cognizant of this fact. They do not realize that in 1946, 40 million enrolled in Blue Cross and now approximately 70 million. The Department of Commerce showed that the Blue Cross paid 82% of the hospital bills of the average subscriber in the nation and the Blue Shield paid between 50% and 60% of the cost of the physicians services. Furthermore, the percentage for the average low income group is above the average for the upper income group below the average, which is as it should be.

The White House Conference is now history, but for sometime to come you will hear repercussions from it. Your National Auxiliary was represented by your President, President Elect, National Public Relations Chairman and National Legislation Chairman. We all worked long hours and tried to gain as much information as possible. It is important that you familiarize yourselves with the highlights of this conference. Copies of January Survey were sent to all state presidents. Read Dr. Dukelow's article in your March Bulletin and also his article in your March Today's Health. I should like to see the Auxiliary members informed and active participants on the local and state level in the program that is being evolved from the recommendations from this confer-

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ence. They may be important to all of our children and grandchildren.

Rural Health: The Rural Health Meeting held in Memphis the first part of February was interesting and informative. As your President, I had a part on the panel of National Representatives the last day. There is so much that can be done in the rural areas and it is a fertile field for us. Health Days, Health Audits or Surveys, Local Health Councils: All of these are important in this program. This group needs your help and I hope many of you will see your way to offer it.

Nurse Recruitment: If you are a graduate nurse you should renew your affiliation with your local nursing group, even if you do not plan to do any nursing, so you may be called if an emergency arises and, too, because it is good public relations. As the Korean war progresses, the shortage of nurses becomes more acute and we should leave no stone unturned to assist in recruiting nurses.

Public Relations is always with us and its importance seems to increase rather than decrease. Dr. Cline's excellent definition of public relations is I quote "To do good, to be good and to tell the people about it." Dr. Henderson states on his President's Page in the A.M.A. Journal of March 31st that 23 state societies now have full time Public Relations men. These men are eager and ready to cooperate with us. All Auxiliary Public Relations Chairmen should work with them. Two new services have been initiated this year by your Public Relations Chairman. They are P. R. Agenda and P. R. File. The P. R. Agenda supplies you with up to date, important information along public relations lines and the file is for your use. I urge you to give us your assistance with this file. We need you to send us worth while material. If all states will do this, we shall soon have available to you much valuable material.

In his article in the March Bulletin, Dr. Austin Smith suggested that we develop a two way highway going to and from our medical society. This I feel is a valuable suggestion, for our men need information regarding what we are doing and suggestions from us almost as badly as we need it from them. I hope you will give thought to this suggestion.

These are just a few of the highlights of activities that I would suggest for you to think about and consider. The National Auxiliary never orders a State Auxiliary to follow any program; it merely makes suggestions. Therefore, on the Local and State Auxiliaries rests the implementation of all worth while projects and programs in the last analysis. On you rests the success or failure of not only your own county and state organization, but in no small degree that of your National Auxiliary.

I hope I have not overwhelmed you with a list of things "You can do," but I do hope that all of you will think seriously of what I have said and try to do your share in some phase of our work. If each of you does this then perhaps the National Auxiliary will be able to say, as Pippa did in Browning's "Pippa Passes," "God is in his heaven, all is right with the world."

(Address delivered by Mrs. Arthur A. Herold, president of the Woman's Auxiliary to the American Medical Association, at the convention of the Woman's Auxiliary to the South Carolina Medical Association, May 16, 1951.)

Dear Doctor;

Does your wife belong to the Medical Auxiliary? If you are one of the 580 whose wives do belong, we salute you. But if you are one of the 593 others in South Carolina whose wives do not belong, then this is addressed to you.

Perhaps you say there is no Auxiliary to which your wife can belong. But we say there is. She can be a member-at-large of the Woman's Auxiliary to the South Carolina Medical Association, a status designed for women who live in sections too sparsely populated with doctors for a county or district Auxiliary to be practical. Your wife can become a member-at-large by paying the state and national dues, \$2.00. That sum buys her the right to vote and hold any office except that of state president. And she will feel more a part of the group when she attends conventions with you.

As a physician you value the privilege of belonging to your county, state and national medical organizations. Your wife has the opportunity of belonging to the Auxiliary because of your membership. She should recognize the high privilege it is to belong, and you should cherish the privilege for her. We hope that your wife is already a member of the Auxiliary, but if she is not we invite her to join.

Hoping to see both of you at the convention next spring, I am

Sincerely,
Harriet Way Shealy
Mrs. Kirby D. Shealy, President
Woman's Auxiliary to the
South Carolina Medical Association

Mrs. Alfred F. Burnside, immediate past president to the Woman's Auxiliary to the South Carolina Medical Association was appointed National Program Chairman at the recent convention in Atlantic City. This appointment was announced by Mrs. Harold F. Wahlquist, National President.

Mrs. Burnside met with a National Auxiliary Committee and with a committee from the American Medical Association in Chicago, in June, to plan the program for the current auxiliary year.

I consider it a privilege to serve on the Advisory Council. The Auxiliary has been carrying on a splendid program for many years and I feel sure under the able leadership of its new president, Mrs. Kirby D. Shealy, that it will obtain a high place in National rating. Your increase in membership, your worthwhile effort with the Jane Todd Crawford Nurse Loan Fund and the Student Loan Fund are examples of your progress.

My best wishes for a most successful year to all of the new State Board.

R. L. Sanders, M. D.

NEWS ITEMS

Dr. Henry W. Moore of Columbia has successfully passed the examinations given by the American Board of Pediatrics and is now a Fellow in the American Academy of Pediatrics.

Dr. S. D. Campbell of Piedmont was honored on July 22 when over five hundred friends gathered to do him honor for the services he had rendered in fifty

years of medical practice. Dr. Campbell was presented with a silver service by members of the Mother's Club and friends in the community.

Dr. E. J. Dennis, recently discharged from the Navy, has opened offices in Moncks Corner for the practice of medicine. He will also have office hours in St. Stephen.

"Nowhere in medicine are more dramatic therapeutic effects obtained than those which follow estrogen therapy in the girl who has failed to develop sexually. A daily dose of 2.5 to 3.75 mg. of 'Premarin' given in a cyclic fashion for several months may bring about striking adolescent changes in these individuals."*

*

Hamblen, E. C.: Some Aspects
of Sex Endocrinology
in General Practice,
North Carolina M. J.
7:533 (Oct.) 1946.

"PREMARIN"

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(equine).*



"Premarin"—a naturally occurring conjugated estrogen—long a choice of physicians treating the climacteric—has been earning further clinical acclaim as replacement therapy in hypogenitalism.

In the treatment of hypogenitalism, the aim of "Premarin" therapy is to develop the reproductive and accessory sex organs to a state compatible with normal function.

Four potencies of "Premarin" permit flexibility of dosage: 2.5 mg., 1.25 mg., 0.625 mg., and 0.3 mg. tablets; also in liquid form, 0.625 mg. in each 4 cc. (1 teaspoonful).

"Premarin" contains estrone sulfate plus the sulfates of equilin, equilenin, β -estradiol and β -dihydroequilenin. Other α - and β -estrogenic "diols" are also present in varying amounts as water-soluble conjugates.



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Dr. H. W. Gibson has recently started practicing in Barnwell. Dr. Gibson is the son of Dr. W. T. Gibson of Batesburg.

Dr. Vincent J. Hyams, a native of Orangeburg, is now practicing in Kershaw. Dr. Hyams finished his internship at The McLeod Infirmary in Florence in July.

Dr. Vince Moseley of the Medical College has been appointed chairman for South Carolina of the National Doctors Committee for Improved Medical Services.

Dr. Malcolm Dantzer recently moved to Mullins and is connected with the Marion and Dillon County Health Departments.

Dr. F. L. Geiger, Director of the Division of Heart Disease and Cancer Control of the State Board of Health, has been notified that he has passed the examinations necessary for certification by the American Board of Preventive Medicine and Public Health.

Dr. Harold P. Jackson and Dr. Robert C. Brownlee have announced the opening of offices in Anderson for the practice of pediatrics.

Dr. D. Lesesne Smith, Jr. of Spartanburg has announced the appointment of Dr. Clarence E. Lyles as his associate.

Dr. Frank H. Stelling of Greenville announces the association of Dr. Leslie C. Meyer in the practice of orthopedic surgery.

Dr. W. Ely Brooks is now practicing urology in Charleston.

On July 1, Dr. J. M. Stallworth became associated with Dr. Wm. H. Prioleau and Dr. Edward Parker in the practice of general surgery.

Dr. A. C. vonLehe has returned to his home town, Walterboro, to practice general medicine.

Dr. W. J. Snyder of Sumter is now a diplomate of the American Board of Obstetrics and Gynecology.

Dr. Anthony White is now associated with Dr. Hal Jamison in Easley.

Dr. and Mrs. J. W. Bell of Greenwood announce the birth of a daughter, Sally, on May 12, 1951. They are also the parents of two other children, Mary Ann, age 8½ and John, age 7.

The South Carolina Chapter of the American College of Surgeons will meet in Charleston on October 3, 1951 at the Roper Hospital and The Medical College. The morning program will be devoted to specialty groups. In the afternoon, starting at 2 P. M., there will be a general session to which the general profession will be invited. The principal speaker will be Dr. Champ Lyons, Professor of Surgery, the University of Alabama. He will speak on "The Clinical Aspects of Changes in Blood Volume"—this is a subject which should be of interest to anyone who practices surgery. There will be other speakers from the South Carolina Chapter.

BOOK REVIEWS

LET'S COOK IT RIGHT by Adelle Davis. Harcourt, Brace & Company, 383 Madison Avenue, New York 17, N. Y. Price \$3.00

After several brief chapters on general factors about foods, cooking, planning, etc., the author devotes the remainder of the book to recipes with generous discussion of methods of preparing healthful meals. The recipes are simple, Mrs. Leisey permits easy leeway for the housewife in her suggestions of over three thousand variations to the three hundred and fifty basic recipes in the book.

Planned to give economical suggestions to present day housewives, this book contains a wealth of practical information. Included will be found chapters titled "Serve Your Salads First," "Milk Drinks," "Make Canning and Pickling Your Hobby," "Revising and Creating Recipes," and "Where To Buy Foods Not Yet On The Market." These titles serve to show the variety that will be found in "Let's Cook It Right," a thoroughly enjoyable and taste tempting book about cooking.

WMH

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A Report on the Efficacy of Dihydroxy Aluminum Aminoacetate

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As a Gastric Antacid

Alglyn®, dihydroxy aluminum aminoacetate, is the product of combining *aluminum* with the amino acid, *glycine*. It was developed by Krantz, of the University of Maryland, in co-operation with the research staff of the Brayten Pharmaceutical Company. The objective was to produce a nonsystemic gastric antacid *in tablet form* that would be consistently prompt and persistent in its action.

In this respect, the dehydrated forms of the aluminum hydroxide gels are known to vary considerably in *bulk* and in *rate of solution* in acid, depending on the drying method (mainly *temperature* and *rate of drying*), and also depending on the individual nature (concentration of the suspended material, its particle size, etc.) of the original liquid gel from which each dry form is made. Accordingly, there are differences in the activity of the various tablets available, depending on their origin. Differences are also found among various batches of tablets made from the same type gels at *different times*, depending on the age of the tablets and the conditions under which they are stored. These variables often made it necessary for the physician to compromise when using tablets; in order to give the patient the convenience of an easy-to-carry dosage form, some efficacy had to be sacrificed.

In contrast to tablets of the dehydrated hydroxides, *Alglyn tablets* were found to possess a uniform reaction rate, regardless of their shelf age. Laboratory evaluations have repeatedly shown that the reaction rate of Alglyn tablets compares favorably with that of liquid preparations of aluminum hydroxide.^{1,2,3} The onset of action is somewhat more rapid for Alglyn than for dried aluminum hydroxide tablets. The difference in reaction rate is measurable by laboratory methods and is sometimes clinically detectable as well, as evidenced by the fact that patients frequently report that they get more consistently prompt relief from Alglyn tablets than from many other aluminum-antacid tablets. In ten minutes the pH is raised to approximately 3.9 and remains above 3.0 for two hours. Even when given in excess, however, Alglyn tablets cannot pro-

duce a pH higher than 4.5; neither cause alkalosis nor stimulate rebound secretion of acid.

Clinical experience shows that Alglyn tablets are eminently effective as gastric antacids, can be used effectively and safely for correcting hyperacidity whenever that is responsible for distress.^{4,5} They are especially valuable in the treatment of patients who have peptic ulcer, and those who seem to be predisposed to ulcer—whenever both rapid and sustained control of gastric acidity is advisable, either for treatment or prophylaxis. In addition to their antacid effect, Alglyn tablets protect against corrosion from gastric juice in these ways:

- 1) curbing peptic activity by inactivating pepsin, independently of their effect on pH
- 2) by forming a coagulum with gastric secretions, resulting in the precipitation of a protective coating on the gastrointestinal mucosa

Altogether, these effects help to create and maintain a gastrointestinal environment that is conducive to uninterrupted ulcer healing.

Although Alglyn tablets have a high acid-buffering capacity, their aluminum content is relatively low (40% less than dried aluminum hydroxide). Alglyn tablets are small, easy to take; have a pleasant mint flavor; do not feel gritty in the mouth.

Alglyn tablets are supplied in bottles of 50 and 100 tablets. Each tablet contains 0.5 Gm. (7.7 grains) of dihydroxy aluminum aminoacetate. Brayten Pharmaceutical Company, Chattanooga 9, Tennessee.

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**TEN POINT PROGRAM
OF THE
SOUTH CAROLINA MEDICAL ASSOCIATION**

1. Cooperation

To promote closer cooperation and better understanding between all agencies, groups and individuals concerned with providing and improving medical care for the people of South Carolina.

2. Extension of Medical Care

To study constantly the need and availability of medical care in each county of the State and in the State at large.

To promote plans for providing or improving medical care where is a need, particularly in the rural areas.

3. Pre-Paid Hospital and Medical Care

To make voluntary pre-paid hospital and sickness insurance available to all the people of the State (through Blue Cross, Blue Shield, and commercial insurance policies), and to promote the widespread purchase of such insurance.

4. Care of Indigent

To work with local county and state agencies, and with philanthropic organizations, toward securing good medical care for the indigent.

5. Public Health

To support the South Carolina State Board of Health in its broad program of preventing diseases and of safeguarding the health of our people.

6. Health Councils

To support the State Health Council in its announced program. To sponsor

the formation of a County Health Council in every county of the state, and to encourage our members to support and to work with these organizations.

7. Hospitals

To promote the expansion of present hospital facilities and the building of new hospitals—where there is a definite need.

To strive for highest standards of professional care in the hospitals in the State.

8. Medical Colleges

To support the Medical College of the State of South Carolina and to bend our efforts toward keeping its standards of education on a par with other medical colleges throughout the country.

To promote good nursing education and good nursing care throughout the State.

9. Education of the Public

To acquaint the citizens of the State with regard to the problems of medical care in existence today, to inform them as to what is being done to solve these problems, and to advise with them as to further plans for securing better health and better medical care for the people of South Carolina.

10. Political Medicine

To prevent political control or domination of medical practice or of medical education.

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1951-1952

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The Importance of Symptomless Intrathoracic Lesions*

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Charlotte, N. C.

Radiographs of the chest are now frequently made in periodical health examinations and as a routine procedure on hospital admissions. Large segments of our population are now surveyed by mobile photo fluoroscopic units. This mass screening of the population has uncovered many unsuspected intrathoracic lesions in addition to the lesions of tuberculosis, evidence of heart disease, mediastinal tumors, and other abnormal conditions. Previously patients with intrathoracic pathology consulted the physician only after distressing symptoms had developed whereas now we are confronted with a new problem in preventive medicine. We are having to advise these individuals the proper course to follow when symptomless lesions are discovered.

We have been alert to the necessity for early recognition and treatment of tuberculous lesions. There has been, however, too much of a tendency to ignore abnormal chest x-ray findings after excluding tuberculosis. This, I think, is largely because of often insurmountable difficulties in diagnosis without thoracotomy. It is important to determine the presence or absence of a neoplastic lesion, and if one is present, to carry out the indicated therapy.

Every possible diagnostic attempt should be made prior to major surgery. This includes obtaining posterior-anterior and lateral radiographs on 14" by 17" films, making smears and culture of the sputum for the predominating organism, searching carefully for acid-fast bacilli and for malignant cells, frequently doing bronchograms and bronchoscopic examinations to obtain secretions from the bronchus from which a more accurate determination of malignant cells by the Papanicolaou technique might be made. Less than one-third of bronchogenic malignancies can be visualized and biopsied through the bronchoscope, but we are able to diagnose another 50% by irrigating the

bronchus with a few cc. of saline solution and examining these washings for malignant cells. However, a very considerable number of cases remain in which recognition of a suspected malignant lesion can be achieved only by direct approach into the thoracic cavity. Our inadequacies in diagnosing these lesions by other methods will require an exploratory thoracotomy and biopsy to establish a definite diagnosis and permit prompt treatment. Exploratory thoracotomy falls into the same category as exploratory laparotomy, which is readily permissible in bizarre intra-abdominal conditions. It would be inconsistent not to afford the same advantage to a patient with indeterminate intrathoracic pathology as would be given a patient with an undiagnosable intra-abdominal disease.

It has been some seventeen years since the first successful pneumonectomy was performed. Since then many diseases of the thorax, which previously were incurable, have come into the scope of surgical correction. This is largely due to the improvement made in anesthesia, to a better comprehension of all physiological conditions relative to the pulmonary system, to a wealth of practical experience in managing surgical thoracic problems, and to the added protection provided by adequate blood replacement and antibiotics. For these reasons morbidity and mortality in patients who are operated upon for chest pathology have been reduced to the present low level. During the last twelve months we have performed eighty-four thoracotomies for the removal of benign tumors, malignant tumors, bronchiectasis, and mediastinal tumors. There has been only one death attributable to operation or anesthesia.

Reluctance to perform an exploratory thoracotomy may lead to an unjustifiable delay in diagnosis. Therefore, the time lost may make cure impossible. I would like to support this statement by presenting a few cases in which the policy of watchful waiting was adopted during which time the condition of the pa-

* (Presented at Annual Session, Myrtle Beach, May 16, 1951).

tient changed from a possible curable to a hopeless state.

The first such case is that of a 19-year-old junior in college who presented x-rays which had been made on a routine examination some fourteen months previously. These films disclosed a coin-like shadow in the base of the right upper lobe. Throughout the entire fourteen months she had remained completely symptomless. Recent radiographs demonstrated the same shadow, slightly larger than on first examination. This small density was located in the periphery of the lung and measured 3 cms. (Fig. 1) in diameter. It



FIGURE 1

The circular singular density in the right third intercostal space is not unlike a metastatic nodule.

resembled a metastatic lesion so much that a very careful physical examination was made, but no abnormality was detected. The sputum contained nothing significant, and bronchoscopic examination was unrevealing. A thoracotomy was performed. The lung was not adherent, and there was a discrete tumor at the base of the right upper lobe. It was distressing to find the hilar structures studded with nodules which extended up along the course of the superior vena cava. A biopsy was taken from a nodule that overlay this great vessel, and the frozen section disclosed that this lymph node was filled with adenocarcinoma. Due to the extensive mediastinal spread, it would have been futile to have removed the entire lung, so only the lobe involved was extirpated. The postoperative course was uneventful and the patient remained in the hospital twelve days.

Comment: Although it has been only eight weeks since operation, she is free of all symptoms. However,

her prognosis is manifestly poor. Any case with a similar coin-like lesion in the periphery of the lung without symptoms should be explored without exception unless the lesion is calcified and all signs point to a tuberculoma.

The second case is that of a 31-year-old white female school teacher who had no symptoms referable to her respiratory system. Several months previously a mobile x-ray unit film revealed a density in her right lower lobe which was diagnosed as "most likely a benign cyst." There had been no appreciable change in the x-ray films for a period of five and one-half months (Fig. 2 and Fig. 3). The patient insisted that

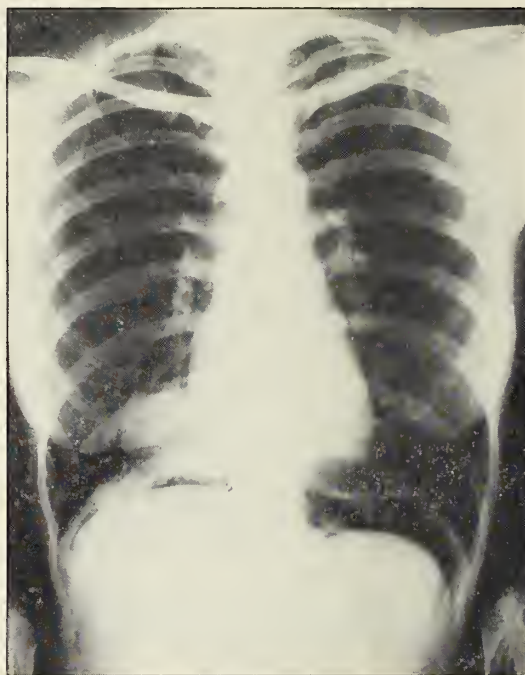


FIGURE 2

A shadow is seen in the right lower mediastinal area. By the use of pneumoperitoneum we were able to demonstrate that there was no relationship of this lesion to the intra-abdominal viscera. Also a swallow of barium disclosed no compression of the esophagus.

she had cancer, but only in recent weeks had she developed a dull pain in the region of the fourth costosternal joint and no external abnormality was found on the chest wall. Thoracotomy showed the lower lobe was not adherent to the chest wall, and there were no enlarged nodules in the hilar region or in the mediastinum. As there were no nodes to biopsy, it was believed that the tumor was most likely benign, for which reason we felt justified in removing only the lower lobe. Pathological sections showed that the lesion was an angiosarcoma. Interestingly, three or four weeks after lobectomy, the original site of pain at the fourth costosternal junction became edematous and reddened. Biopsy of the fourth costosternal cartilage recovered the same type of tumor as that

found in the lung. This patient lives two years afterwards, although she remains in bed riddled with metastases in her spine and the opposite lung.



FIGURE 3

A lateral view more clearly outlined the tumor.

Comment: To postulate whether or not resection of the lobe some five months previously would have eliminated the spread of this tumor is of academic interest. Certainly until some better method is discovered, we are obliged to adhere to the well founded principle that the sooner we remove a malignancy the greater is the chance of cure. If we wish to wait until there is definite x-ray evidence of malignant change in a lesion, the chances of obtaining many cures will be distressingly small.

The next case is a 55-year-old white male who was admitted to the hospital because of arthritis in his knees and ankles of eight months' duration. He had no respiratory symptoms. A routine chest x-ray showed a circular shadow in the left apex. The lesion was in the periphery of the lung and measured about 2 cms. (Fig. 4). After careful questioning, he stated that he had always had a slight cough and possibly there had been a change in the character of his cough during the last four months, but this had caused the patient no concern. Because of the characteristic appearance of a metastatic tumor a careful physical examination was done. The only suggestive abnormality was found in the left kidney, as one of the superior calyces failed to fill with intravenous pyelography. For this reason the kidney was explored but no pathology was found. The sputum examination was normal. Washings obtained from the left upper lobe by bronchoscopic ex-

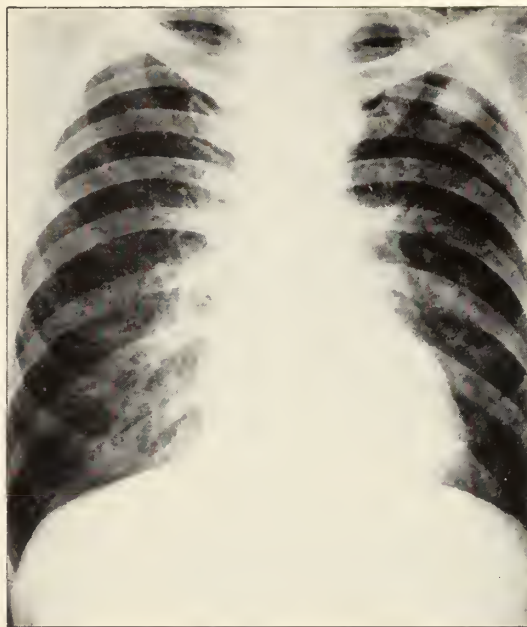


FIGURE 4

The discrete density in the left upper lobe is very suggestive of a metastatic lesion.

amination were negative for tumor cells. An exploratory thoracotomy was done. The hilar area was clean and no other abnormality could be detected in the pleural cavity. Thereupon the left upper lobe was removed. Microscopic sections of the tumor were sent to four pathologists and four diagnoses were obtained, namely: "papillary adenocarcinoma," "alveolar cell carcinoma," "metastatic carcinoma," and "adenomatosis of the lung." For a period of forty-two months the patient has been free of arthritis and there has been no recurrence of his cough or of any other respiratory symptoms.

Now that the population is conscious of the advisability of having a chest film made annually, we would be negligent in our responsibility to the public unless we recognize the possibility that many of these symptomless lesions are malignant or may become malignant. Some patients will state that they have no symptoms whatsoever, although they have had a cough for a number of years. After carefully interrogating these individuals, we often find that there has been a slight change in the character of the cough. By the same token that we recognize that a change in bowel habits might signify malignancy of the large bowel, so we should accept a change in the character of a cough as being significant of some malicious chest pathology. However, only x-rays may reveal the existence of a growth in the thoracic cavity, and these sometimes fail to disclose intrathoracic lesions, especially when only a posterior-anterior view is obtained. In this connection, it has always seemed inconsistent that roentgenologists will not attempt to read the findings in a knee joint without two views of this structure,

but for the most part they will willingly attempt to interpret chest films with only the posterior-anterior view. The following case is an example.

This is the case of a 55-year-old white male who had no recent symptoms, although he did contend that he had had a mild cough for a number of years. A routine posterior-anterior view of the chest did not disclose any pathology (Fig. 5). However, the lateral film illustrated the importance of securing both views (Fig. 6). A thoracotomy was performed with the idea that we were most likely dealing with a dermoid cyst. To our complete surprise we discovered that it was a calcified aneurysm arising from the innominate artery. Thereupon the thoracic cavity was closed. The patient has remained symptomless since.

DISCUSSION

The recent popularity of periodical physical examinations with routine chest films and the fact that a large segment of our population is now being surveyed by mobile x-ray units have uncovered many symptomless lesions. We are now becoming alert to the necessity of early diagnosis and treatment of these lesions. Until a more accurate diagnostic method is developed, exploratory thoracotomy must be used more often to salvage these individuals with symptomless intrathoracic tumors, as an unknown percentage of them are malignant. It is only in the early phases of malignancy that resective surgery has an excellent chance of curing the disease. On the other hand, if the lesion is benign, the problem is safely solved, as the mortality and morbidity resulting from the removal of benign intrathoracic lesions is extremely low. There have been no deaths from the removal of benign tumors in many chest clinics, as there have been none in ours.

SUMMARY

1. The increasing number of symptomless intrathoracic lesions which are being discovered by better diagnostic methods presents a new problem in the management of such conditions.
2. The dangers of watchful waiting in symptomless lesions are real.
3. Exemplary cases have been reported.
4. Exploratory thoracotomy is recommended in all cases of noncalcified and symptomless intrathoracic lesions.

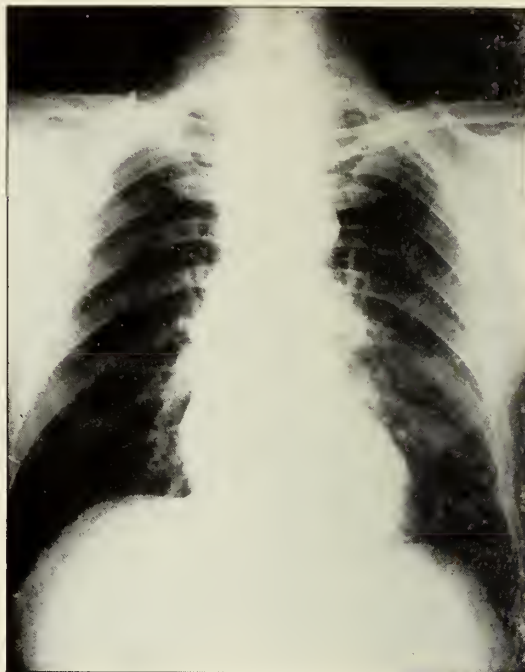


FIGURE 5

This illustrates how a posterior-anterior view of a chest is likely to miss revealing mediastinal tumors.



FIGURE 6

A lateral x-ray film of the same patient definitely outlines a calcified tumor overlying the heart.

Reading Difficulty in Children*

By J. W. JERVEY, M. D.
Greenville, S. C.

Reading difficulty is a great problem of present day education at all levels. It is manifest when a child begins to read and is preventable. Many affected children have a high intelligence quotient. It occurs much more frequently in males.

Of 2,000,000 new pupils each year in the United States nearly 300,000 fail for lack of reading skill. The conclusion is obvious. Something is wrong.

The answer lies in recognition of differences in capabilities, in giving individual and special aid to those who are slow, remembering that it is better to produce slow readers than non-readers, and not forgetting that gifted students should have opportunities for more rapid advancement. This utopia will not be attained soon, but it is a goal for which to reach, and its accomplishment is possible.

In many states elementary school teachers, meet lower requirements and are paid less than any others. What a shameful commentary on a supposedly enlightened era! The immediate objective is therefore the employment of the most experienced, most intelligent, and highest paid teachers and special instructors in primary grades. This *can* be done under the program of education outlined by our beloved Governor Byrnes.

Most cases of dyslexia are first seen between the ages of 7 and 10 years. In spite of failure they have often been advanced from year to year, partly for reasons of diplomacy. Such promotions may be due to pressure by parents who for understandable reasons regard with apprehension the stigmata associated with failure to progress. We must realize that most cases occurring in the first year are due to lack of reading readiness. Such children, if allowed to proceed, will in time pick up required skills rapidly and go on normally with their class. However, let's not inadvertently encourage a system of reward without merit saying, as Bernard Iddings Bell reminds us, like the dodo, "Everybody has won and all must have prizes." If such promotions are to be condoned, there must at the same time be a sincere effort to provide help where it is needed.

All children want to learn, and enjoy it. We should provide each with opportunities to match his capabilities. There should be no place for "remedial reading" in our schools of tomorrow. For the present it must be tolerated. On the other hand "developmental reading" programs will assume a position of increasing importance as time goes on.

ETIOLOGY: There are three times as many cases of dyslexia where flash methods of teaching have alone been used as there are where phonetic instruction has been employed. The more rapid techniques are excellent for most children, but some cannot be so taught and must learn by more dependable means.

Teachers may go too far in avoiding attention to letters in early reading experience. It has been shown that beginners do better when they can name and write capital and small letters.

Lack of provision for reading at home before school age discourages reading interest, so that we may say many cases are due to parent failure.

Too much emphasis on speed may create a sub-conscious sense of defeat and conflict, and can produce reading inability.

Latest studies have emphasized the importance of emotional problems arising in or outside of the home as causes of dyslexia, and when there is no response to specific remedial techniques, some underlying factor of this nature must be considered. However, many problem children have ceased to be such when reading difficulty has been cured. It is hard to distinguish at times which is cart and which is horse.

Cerebral dominance may be a factor. Handedness alone is not important, but dyslexia does appear more common in mixed dominance, that is where there is left handedness with a dominant right eye or vice versa. In these cases definite evidence of confusion can be clinically demonstrated.

The ophthalmologist comes into the picture early because it is generally and erroneously assumed that eye disturbances are closely associated here. Though more obtain them, only 15% require glasses. This is about the number of good readers who wear glasses. Phorias are probably of little consequence as it has been shown that they occur with equal frequency in good and poor readers. There is a possible association between dyslexia and a low amplitude of fusion, or a weak power of convergence. The author leans to the view that poor visual acuity is the only eye anomaly which is irrefutably linked to reading difficulty.

DIAGNOSIS: Any tyro can make the diagnosis when difficulty is clearly established. The potential case, and the one in its incipency should interest us more, for here is where intelligent steps taken in time will save endless worry and countless expense.

There are various ways of trying to determine a child's readiness for reading. However, it is probable that no test will ever be devised which as an index of reading readiness will equal a good teacher's judge-

* (Presented at Annual Session, Myrtle Beach, May 16, 1951).

ment based on weeks of careful observation and study of the individual. One should know of each child something of his heredity, personality, emotional state, socio-economic status, physical condition, general background, experiences, and vocabulary. No two cases are alike.

A preschool check of eyes by an oculist is desirable as high refractive errors easily escape ordinary visual tests. Telebinocular fusion tests are not reliable.

Frequent signs of trouble are reversals, omissions, substitutions, failure to recognize the initial sounds of words, and failure to progress from left to right.

It is impossible to be sure as to the presence of dyslexia until reading is actually attempted.

PREVENTION AND TREATMENT: All children of average intelligence with reading difficulty can be taught to read. Except for the correction of visual acuity and other physical defects, all methods of treatment and prevention are somewhat empirical and clouded in controversy. One can find in the available and accepted literature substantiation of almost any view that he may express.

In the field of prevention, interest in reading should be stimulated in the home prior to school age. Kindergarten and preschool training are excellent. Children should be exposed to many and varied experiences and their vocabularies enlarged as much as possible. The preschool child should be taught to recognize and write the capital and small letters of the alphabet. There should be less emphasis placed on speed in reading and more on comprehension.

All children cannot be taught by so-called "progressive methods." Where difficulty is incipient or well established there is no recourse but to begin with the most elementary work regardless of grade, going back to the fundamentals of syllable formation, word structure and analysis, phonetics, and the teaching of spelling. Kinesthetic methods such as tracing, sand writing and typing are of value. Persistent efforts must be made to stimulate interest in reading by providing suitable material. Self confidence and self respect must be increased while there is explanation to and mutual understanding with the child as to ultimate aim which is ability to read for pleasure and profit. Patient collaboration is necessary, remembering that difficulties will clear up slowly as they have begun, and that progress cannot be compared with that of more rapidly developing classmates.

Ideally all retarded readers should have special tutoring, for more than just a few short weeks, for more than just a few minutes a day, and not by the regular teacher. They should have separate, attractive, and adequate space for instruction, and should not be required to take on also the reading curriculum of the regular class.

SUGGESTIONS OF PRACTICAL VALUE

1. Correct visual acuity and other physical defects.
2. Insist on individual attention and tutoring prefer-

ably by someone other than the mother or regular teacher.

3. Insist on training in the fundamentals of word structure, spelling, recognition of first letter sounds, and progression from left to right.

4. Enquire into background, training, personality and emotional factors and offer advice accordingly.

5. Observing evidences of confusion, determine laterality and advise as to training steadily the right or left hand.

6. See that appropriate reading material is provided in subjects of interest to the individual.

CONCLUSION: The whole question is exceedingly intricate, difficult, and impossible of a simple answer which will please everyone.

It is probable that any good tutor will be successful in the management of reading difficulty, no matter what method he employs so long as he is consistent and persistent. The child will improve from the very fact that something is being done for him.

Let it be remembered that all cases can be detected and corrected or improved by simple methods aided by intelligence and training.

Lastly, the alpha and the omega we must have our most intelligent, our best educated, our highest paid teachers and special tutors in the primary grades.

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Cavernous Hemangioma

REPORT OF AN UNUSUAL CASE

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AND

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This case of a giant cavernous hemangioma, is reported not only because of the rarity of this tumor in the integument, but also because of some unusual features presented by this patient.

REPORT OF CASE

E. P., a colored male, exact age unknown, but the patient estimated his age at between forty-five and fifty years, was admitted to Tuomey Hospital on August 17, 1950, with the chief complaint of a "lump on my shoulder busted open." The shoulder tumor had burst open five days previously, had been draining yellowish-red material since that time and had recently caused pain in the area. The tumor began as a small growth at the tip of the clavicle between ten and fifteen years ago and had increased slowly and steadily in size up to the date of the admission to the hospital. During these years, the patient required increasingly larger shirts in order to cover the enlarging mass. The patient was single and found the mass a social liability.

The history revealed measles, malaria, whooping cough, typhoid fever, intolerance to fatty or greasy foods, and low back aches. His occupation was farmer.

As a small boy, he had a fall upon his right elbow, which left evidence of a fracture dislocation at the elbow, producing an osteoma. He had visited the orthopedic out-patient department and had this area x-rayed, for he had developed limitation of motion in this joint. Otherwise, he had not consulted a physician in recent years. The family history was non-contributory.

The physical examination (see figure one), revealed a well, but abnormally developed, apparently well nourished, stooped, deformed, elderly colored man whose features and extremities were those of a form of acromegaly. He was well oriented, but of low intelligence. The head was steeple-like, face expressionless, mandible prominent and protruding. The eyes reacted to light and accommodation; the extra-ocular movements were normal; the sclera were clear, but there was marked arcus senilis and clouding of the lenses. Vision was diminished. The teeth were poor as was the oral hygiene. The lower lip was devoid of muco-epithelium and bled easily to touch.

At the right acromioclavicular junction was located a hard, firm tumor, with areas of softening, and

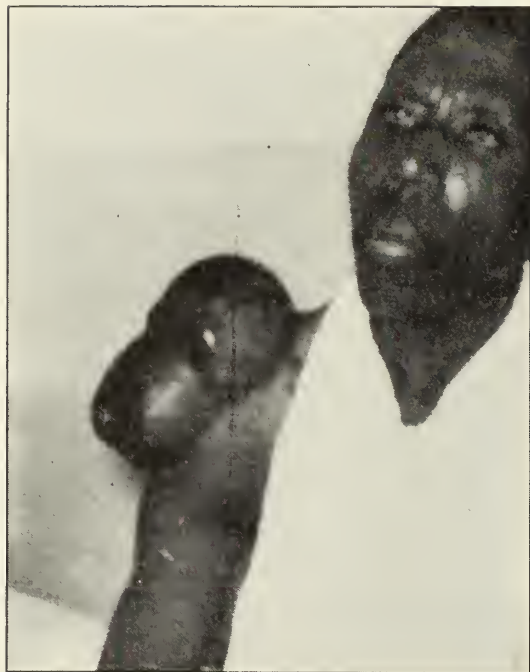


FIGURE 1



FIGURE 2

measured fifteen by nine cm. It grew along the superior border of the shoulder and the lateral aspect of the upper arm to approximately the level of insertion of the deltoid muscle. The skin over the mass was very tight, shiny, and had several sinuses which drained continuously a yellowish-red, serosanguinous material from the superior lateral aspect. The growth was slightly moveable and not attached to any of the underlying bony structures.

The right elbow had a bony, hard mass, three by four cm., attached to the lateral epicondyle of the humerus. The veins of the right arm were larger and collapsed to palpation easier than those of the opposite member. At the flexor surface of the elbow joint, was a subcutaneous soft tissue mass, fusiform in shape and measuring in its largest dimensions ten by five cm. Flexion and extension of the elbow were less than normal.

The right wrist was enlarged and beneath the skin was palpated a neoplasm which extended to the distal palmar creases of the hand and above to the transverse volar ligament of the forearm. It was of the same consistency and tactile qualities as the mass in the elbow flexor area. The patient was unable to completely extend the fore-fingers or flex them completely in any of the interphalangeal joints. Wrist flexion was seventy degrees. The hands were spade-like.

The chest was clear. The heart was enlarged; the PMI being one cm., to the left of the midclavicular line in the sixth left interspace. The rate was regular at eighty-six per minute. The blood pressure was 130/90; temperature 98 degrees, and respiratory rate was 20. The remainder of the physical was not remarkable.

The draining sinuses were washed out with sterile saline solution and sterile dressings applied to the area. The patient was placed on a regular diet and allowed to be up and about the ward.

The laboratory studies on admission elicited the following data: 3,375,000 red cells and 74% hemoglobin, 6,850 white cells, of which 52% were polymorphonuclear cells, 46% lymphocytes, and 2% eosinophiles. The serum calcium was 9.8 mg.%, and the serum phosphorus 6.2 mg. %. (nor. 4.5 - 5.5 mg., %.) Urinalysis, of a voided specimen, showed a slight trace of albumin, much mucous, 6-8 pus cells per high powered field, and bacteria too numerous to count per high powered field. The Kahn was negative. Thick and thin smears for malarial parasites were negative. The radiologist reported the x-ray of the right shoulder as showing a large tumor mass above the end of the clavicle which was circumscribed and contained a large amount of calcification. (see figure two). On x-ray, the mass appeared as a calcified osteochondroma.

This patient posed a diagnostic problem. None of the consultants who saw this patient had ever seen a lesion like this before. The pre-operative consensus of opinion was that this was a low grade malignant tumor, probably of the sarcomatous group.

The draining areas were washed daily with sterile saline and sterile dressings applied. Codeine, grain one, was administered t.i.d., for pain. Penicillin, 300,000 units, were administered i.m., prophylactically, daily. The patient was not enthusiastic over the prospects of being separated from his tumor. Several days were required to prepare the patient psychologically for surgery.

Pre-operatively, the patient received the usual dietary precautions followed by the routine medications, before an operation.

A general anesthetic of cyclopropane and oxygen were administered. The operative field was prepared and draped in the usual fashion. A wide elliptical incision was made about the tumor and by sharp dissection, the tumor was removed from the acromioclavicular and deltoid attachments. The blood supply to the area was very rich and hemostasis was accomplished by hemostats and plain ties. Dead space was eliminated by closing the subcutaneous tissue with 0 chromic sutures on a curved needle. The skin was closed with 00 black silk sutures. Pressure dressings were applied, using an ace bandage. This also aided control of exudate and hemostasis.

Upon the patient's arrival to his bed, after operation, an alert nurse noted that his pulse was fast and weak and very shortly thereafter, she was unable to feel the patient's pulse. At the same time, the respirations became rapid and shallow. The nurse called the anesthetist who immediately went to the patient and administered five-tenths cc. of epinephrine intravenously. A unit of plasma was started intravenously as was one-thousand cc. of five percent dextrose in saline. Oxygen was administered at this time by catheter and continued for several hours. The patient reacted nicely and came around satisfactorily in a few minutes, to this therapy.

It was believed that this post-operative episode was due to some laryngospasm, producing an anoxic state with cardiac depression.

Post-operatively the patient received analgesia, antibiotics and vitamins. The patient was typed, matched, and cross-matched and received 500 cc's of whole blood, the following morning.

The night of operation the patient complained of pain in the right upper incisor tooth. The following morning the tooth was extracted by a dentist. The temperature spiked to 102 degrees and gradually returned to normal on the fifth post-operative day. On the fifth post-operative day, the wound was dressed but healing was not progressing normally, probably due to the suture tension necessary to approximate skin edges. On the tenth post-operative day, some of the skin sutures were removed. The wound was not healed in several areas. On the twentieth post-operative day, the remaining sutures were removed, but in the middle of the wound at the tip of the clavicle, was an area of healthy granulation tissue. The patient continued to be ambulatory and asymptomatic except for discomfort in his right wrist at times. The wound continued to heal slowly by granulation. Two months after operation, the wound had healed completely and had been healed for several days and showed no signs of breakdown. The patient was discharged and advised to return should he have further trouble, (see figure three).

Pathological diagnosis: Cavernous hemangioma of shoulder.

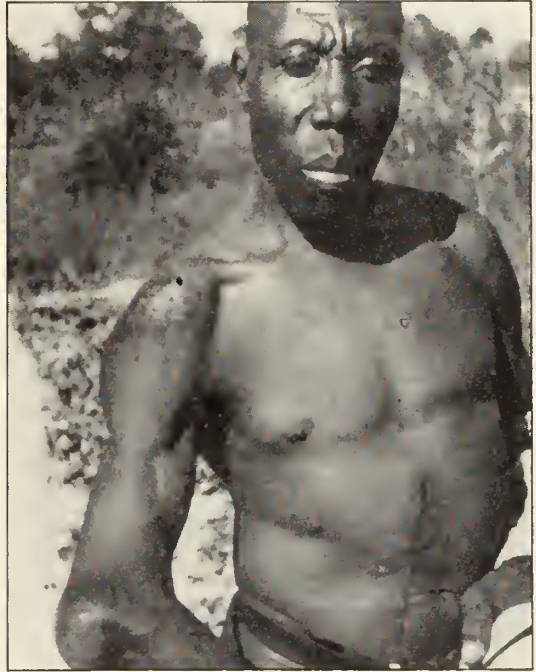


FIGURE 3

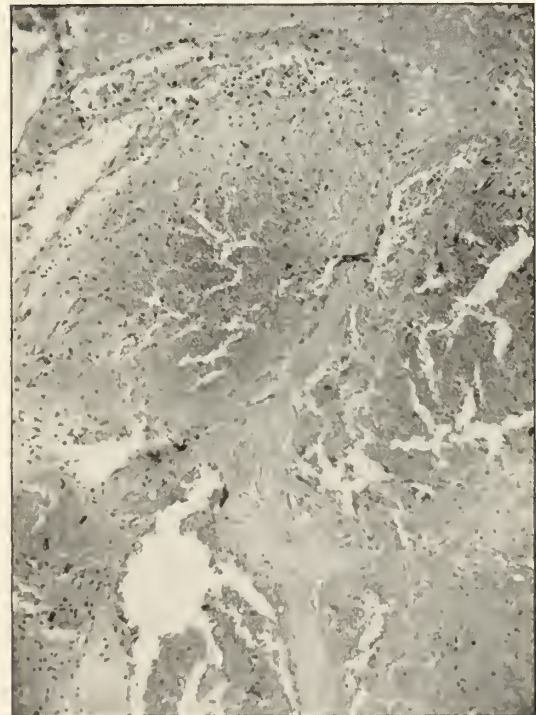


FIGURE 4

Gross Pathology: The specimen consisted of the tumor mass in two portions measuring 15 cm., and weighing 1,050 grams. It was covered by a twenty

cm., elliptical piece of wrinkled black skin. The tumor was multilobular, apparently encapsulated, and composed of yellowish brown tissue. The capsule was partially calcified.

Histological pathology: (See figure four). Histological section revealed skin and skeletal muscle containing a network of large blood filled spaces, having dense fibrous walls and benign endothelial lining. There was much fibrous connective tissue throughout the section.

COMMENT

This case of a giant cavernous hemangioma, a rare tumor of the skin and superficial structures, presents unusual features. The tumor was present for many years, but the patient was asymptomatic except for the psychological aspect, but even this caused the patient little concern for he lived alone and worked as a farmer from a two-room shack. It is interesting to note, that finally the tumor grew so large and by pressure alone caused the skin to break open in several places producing sinus tracts. Other interesting features about this case were the raw bleeding lips and gums which failed to respond to high doses of vita-

min therapy; the heavy and unusual arcus senilis the patient presented; the steeple-like head of the patient; but most interesting were the tumor masses at the flexor surfaces of the wrist and elbow which were not biopsied during that admission because the patient would not consent and because he had such a prolonged stay for removal of the tumor. We hope to have the patient return for biopsy and diagnosis of these tumors for it is possible that they too are hemangiomas.

We should like to reiterate caution to those who would use cyclopropane anesthesia. We believe that blood should be available in the operating room for any patient who has a large tumor mass removed from the body, whether upon the surface or beneath the surface of the body.

SUMMARY

An additional case of a giant cavernous hemangioma, of the skin and subcutaneous tissue, with unusual features is added to the literature.

A plea is made for an increased awareness of the possible complications which may arise from what, at the onset, appears to be a relatively simple and harmless operative procedure of excision of a superficial tumor.

CANCER

Edited by HENRY W. MAYO, JR., M.D., Charleston, S. C.

CARCINOMA OF THE COLON AND RECTUM

A CLINICAL STUDY

ROBERT B. LEONARD, M. D.*

AND

HENRY W. MAYO, JR., M. D.*

A recent review article¹ from this clinic dealt with the incidence, symptomatology, diagnosis and treatment of malignant lesions of the colon and rectum. This study is an attempt to review critically the experience with these neoplasms at Roper Hospital during an 11 year period.

From January 1, 1940 through December 31, 1950 there were 117 patients assigned a clinical diagnosis of carcinoma of the large bowel. Nine patients for whom cecostomy or colostomy was done, and two patients for whom exploratory laparotomy was done, had no biopsy proof of diagnosis. These 11 patients have expired, presumably of cancer. Three other cases were admitted with abdominal masses and diagnosed as having carcinoma of the colon (without x-ray confirmation), and for various reasons were discharged without treatment. These 14 cases were excluded from further consideration because of the lack of microscopic diagnosis. There remained for study 103 cases

of histologically proven carcinoma.

The lesions in 66% of these 103 cases were found in the rectum and sigmoid areas combined, and the rectum alone was the most frequent location of malignancy (Table I). No significant difference in incidence with regard to race and sex was noted (Table II). The average age of the patients was 54.5 years, the oldest being 82, and the youngest 18. The average duration of symptoms was approximately seven months. Twenty-three per cent of the patients reported for treatment in less than one month after onset of symptoms, but 13 patients had symptoms for 16 months or more before seeking medical advice.

The most common symptom encountered in the entire series was abdominal pain (58%), while rectal bleeding (50%) was almost as common. Other symptoms, in order of diminishing frequency, were constipation, distention, nausea, vomiting, anorexia and weakness. The presence of a mass, diarrhea, tenesmus, rectal aching and decreased stool calibre were less frequently noted. Lesions of the right colon were initially manifested in most cases by abdominal pain, anorexia, or melena. Presenting symptoms in patients with left colon lesions were most frequently abdominal pain or constipation, and, in patients with rectal or sigmoid lesions, pain or rectal bleeding. Thirty-eight per cent of the patients in the series had clinical evidence of large bowel obstruction when first seen. One case was unusual in that the presenting symptom was a convulsion, caused by brain meta-

* (From the Department of Surgery and the Cancer Clinic, The Medical College of the State of South Carolina, and the Roper Hospital, Charleston, South Carolina.)

TABLE I
SITE OF LESION

Site	No. of Cases	
Rectum	42	66% Rectum and Sigmoid
Recto-Sigmoid	5	
Sigmoid	21	
Descending Colon	6	16.5% Left Colon
Splenic Flexure	3	
Transverse Colon	8	
Hepatic Flexure	2	17.5% Right Colon
Ascending Colon	13	
Cecum	3	
Total	103	

TABLE II
INCIDENCE

Sex	No. of Cases	
Males	49	
Females	54	
Race		
White	59	
Colored	44	
Age		
10 - 20	1	75 Cases
21 - 30	7	
31 - 40	9	
41 - 50	17	
51 - 60	26	
61 - 70	32	
71 - 80	10	
80 and over	1	

TABLE III
METHOD BY WHICH TUMOR FIRST LOCATED

	No.	%
Abdominal examination	10	9.7%
Rectal examination	32	31.0%
Proctoscopic examination	18	17.5%
Barium enema	40	38.9%
Laparotomy	3	2.9%

stases from a right colon lesion, as proved by autopsy.

In 58% of the cases reviewed, the clinical diagnosis was made on the basis of rectal examination, proctoscopy or abdominal examination (Table III). Forty cases required barium enema to establish diagnosis, and three cases were diagnosed only by exploratory laparotomy. Of especial interest is the fact that in 32 of the 42 cases of carcinoma of the rectum, the lesion could be palpated digitally, and in the remaining ten cases the lesion could be visualized through the proctoscope.

Anemia (less than 11 grams hemoglobin) was a prominent finding in many cases, occurring in 61% of patients with right colon lesions, in 49% of those with left colon lesions, and in 51% of the patients with carcinoma of the rectum and sigmoid.

The majority of the patients were prepared for operation by the usual methods of hydration, correction of anemia, electrolyte balance, and vitamin

deficiencies, and the administration of a low residue diet. The double lumen tube was used frequently for preoperative decompression. However, most cases with a high degree of large bowel obstruction were subjected to colostomy or cecostomy as a preliminary measure. Sixty-nine per cent of the cases, in addition, received preliminary drugs in the form of non-absorbable sulfonamides, or, in an occasional instance, streptomycin. The use of these drugs has resulted in only moderate diminution in postoperative morbidity and mortality.

During the first hospital admission, 47 of the 103 cases were thought to be hopeless from the standpoint of cure (Table IV). In 19 cases, there was no attempt at palliation, either because of the stage of the disease or because of the poor general condition of the patient. Eleven of these cases had rectal biopsy only. Two were offered operation and refused. Eight patients had exploration only. One patient still survives, two years after rectal biopsy, but 17 died within two years, and one was lost to follow up.

The various operative procedures were performed by a number of different surgeons, including both members of the resident and attending staff. As indicated in Tables IV and V, many of the operations were done in two stages. In one case, reported elsewhere,² a remarkable palliation was achieved by a three-stage procedure. Colostomy or cecostomy alone was partially effective in amelioration of symptoms, but did not seem to prolong life significantly, since all of these patients died within one year. The palliative resections were a little more effective, but the results of these are not impressive. Only one patient of this group of 11 palliative resections is still alive, two years after operation.

At the time of operation, 56 cases were thought to be in a curable stage of the disease. The various operative procedures employed in this group are recorded in Table V. Four of these 56 patients died in the hospital, an overall mortality rate of 7.2%. The causes of death in these four cases were, respectively, small bowel obstruction due to volvulus of the ileum, suture line breakdown and peritonitis, shock, and bronchopneumonia. Twenty-nine patients in this group are still alive, although three of them present definite evidence of recurrence. Thus, 26, or 46.4%, are still alive without definite evidence of recurrence. Three of these have survived five years or more. Pathologic examination of the specimens from the 29 surviving cases showed regional lymph node involvement in nine, or 31.0%, while there was regional lymph node involvement in 13 (68.4%) of the 19 cases succumbing to carcinoma following discharge from the hospital.

In almost all cases there was definite correlation between the duration of symptoms and the stage of progression of the malignancy at operation. Since an average duration of symptoms of approximately seven months resulted in a possible salvage of only 26 of 103

patients, the importance of earlier diagnosis is obvious. It is again emphasized that any patient complaining of cramping abdominal pain, rectal bleeding, distention, increased constipation, or weakness and anemia, should be studied thoroughly to rule out large bowel malignancy. Such a study should include the usual complete history and physical examination, including digital rectal examination, and proctoscopy and barium enema. An increased awareness of the possibility of large bowel cancer in any patient with bizarre symptomatology will result in earlier diagnosis and a greater salvage rate.

Summary

A study of 103 cases of histologically proven car-

cino-ma of the colon or rectum seen during the period 1940 through 1950 has been presented. Of these 103 patients, 26 are still alive without definite evidence of recurrent malignant disease, while five are alive but present evidence of the presence of cancer. A plea is made for earlier diagnosis of these lesions to improve the survival rate.

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TABLE IV
INOPERABLE CASES (19)

Operation	No. of Patients	Hospital Deaths	Mortality Rate	Lost To Follow-Up	Died of Other Causes	Died of Cancer No.	Died of Cancer Less Than 1 yr.	Died of Cancer Less Than 2 yrs.	Alive	Average Survival Time
Biopsy only (Rectal)	11	3	27.2%	1	1 (2 yrs.)	5	2	3	1 (2 yrs.)	19 mos.
Exploration only	8	5	62.5%	0	0	3	3	0	0	6 mos.

PALLIATIVE PROCEDURES (28)

Cecostomy or colostomy only	14	4	28.5%	1	1 (4 mos.)	8	8	0	0	6 mos.
Ileostomy only	1	1	100%	0	0	0	0	0	0	0
Ileo-colostomy only	2	0	0	0	0	2	1	1	0	12 mos.
Cecostomy or colostomy and palliative resection with anastomosis	6	3	50%	0	1 (4.5 yrs.)	2	2	0	0	22 mos.
Palliative resection with anastomosis	5	0	0	0	0	4	3	1	1 (2 yrs.)	12 mos.

TABLE V
PRESUMED CURATIVE PROCEDURES (56)

Operation	No. of Patients	Hospital Deaths	Mortality Rate	Lost To Follow-Up	Died of Other Causes	Died of Cancer Less Than 1 yr.	Died of Cancer Less Than 2 yr.	Died of Cancer Less Than 3 yr.	Died of Cancer Less Than 4 yr.	Died of Cancer Less Than 5 yr.	Alive Years	Average Survival Time To Date
Excision of malignant polyp	1	0	0	0	0	0					1	3 yrs.
Cecostomy or Colostomy & resection with anastomosis	11	1	9.1%	0	1 (2 mos.)	3	1	2			3° 1°	2.2 yrs.
Resection and end-to-end anastomosis	22	1	4.5%	2	1 (1 yr.)	5	1	2	1	1	5 4 2°	2.5 yrs.
Mikulicz exteriorization & resection	4	0	0	0	0	2	1		1	1	1	2.4 yrs.
Colostomy and abdomino-perineal resection	3	1	33.3%	0	0	1		1			1°	2.7 yrs.
Abdomino-perineal resection	15	1	6.7%	0	0	8	3	3	2	2	1 1	2.4 yrs.

*Indicates one case with definite recurrence.

°Indicates questionable recurrence (nodular liver)

THE PRESIDENT'S PAGE

Occasionally, a smarter and more vocal man expresses in logical sequence, clothed in beautiful language, ideas that have lain dormant and disorderly in the minds of his hearers. Such was my experience recently when I heard Dr. Charles Haddon Nabers, pastor of the First Presbyterian Church of Greenville, speak to the Greenville Rotary Club on "Leadership." This talk was so pertinent to these troublesome times when people cry for leadership in all phases of human endeavor—in government, in social betterment, in religion and in organized medicine—that I wish to pass on to you, as well as I may, Dr. Nabers' thoughts on what it takes to be a leader.

The late Dr. John L. Mott, president of the International Y. M. C. A., and himself a great leader of youth, used to say that a leader was one who is going ahead, who knows where he is going and who has the power to take others with him.

A great Chinese philosopher said to Ex-president U. S. Grant that people might be divided into three classes: the immovables—men who are fixed in their thinking and reactions and who cannot be moved from the groove into which they have settled; the movables—men who can be easily swayed by any passing fad or fancy; and the movers—a small group who are the leaders. They are the men who are out ahead, who know where they are going and who have the power to take others with them.

Leaders are not born as such. They must plan their lives in such a way that they develop powers of leadership. This planning involves five phases. First, there must be a firm decision to become a leader. Then there must be willingness to accept self sacrifice. No man can give all his time and energy and thought to his own personal affairs and at the same time expect

to lead others where he would. Next he must possess enthusiasm and zeal for his objective, else he will not only fail to carry others with him, but he will falter in his journey toward his goal. Finally, the leader must be willing to be lonely. He is out in front and alone. His leadership will be questioned and his objectives may be scorned and derided by others who seek themselves to lead or who wish to obstruct. He will make enemies, arouse jealousies, and be the subject of animosities.

Finally, and this is my only original idea, great leaders cannot always be so. Years bring changes in the mental alertness, the physical stamina and the will to fight, to all of us. The man who is radical and progressive, and fired with a vision in youth, tends to become conservative, static and satisfied with things as they are in old age. He tends to cease to be a mover and to become one of the immovables. Unfortunately, the changes in his attitude and capabilities are accompanied by mental changes which frequently make it impossible for him to realize that he has served his time and should retire. When that time comes, if retirement is not voluntary, then a new leader must forcefully push him aside, and his followers must denounce his leadership and accept the new. Hence arises the need for a continuity in the training of leaders, and hence it is that sometimes progressive action has to be so cruel to erstwhile heroes.

Perhaps, it is this last idea that has prompted the suggestion that Past-Presidents no longer be members of the House of Delegates of A. M. A. and of our State Association for the remainder of their lives. Certainly at one time they were leaders, but in time they all will become immovables.

J. Decherd Guess

MEDICAL COLLEGE OF THE STATE OF SOUTH CAROLINA**SYMPOSIUM ON DIABETES****October 30-31, 1951****TUESDAY, October 30, 1951**

8:30- 9:00 A. M.—Registration & Greetings	
9:00-10:00 A. M.—Metabolism of Glucose	Dr. W. M. McCord
10:00-11:00 A. M.—Various Preparations of Insulin	Dr. P. C. Gazes
11:00-12:00 A. M.—Management of Diabetes	Dr. Robert Wilson, Jr.
12:00- 1:00 A. M.—Diabetes in Surgery (Roundtable)	Dr. H. W. Mayo, Jr.
2:00- 3:00 P. M.—Sedation Hypnosis & Anesthesia in Diabetes	Dr. J. M. Brown
3:00- 4:00 P. M.—Potassium Therapy in Diabetic Coma	Dr. P. C. Gazes
4:00- 5:00 P. M.—Medical Clinic and	Dr. Vince Moseley
5:00- 6:00 P. M.—Open Discussion	

WEDNESDAY, October 31, 1951

9:00-10:00 A. M.—Laboratory Control of Diabetes	Dr. D. W. Ellis
10:00-11:00 A. M.—Acute Diabetic Emergencies	Dr. Vince Moseley
11:00-12:00 A. M.—Diabetes in Children	Dr. C. D. Conrad
12:00- 1:00 A. M.—Diabetes in Obstetrics	Dr. L. L. Hester
2:00- 3:00 P. M.—Diabetic Neuropathy	Dr. C. deSaussure
3:00- 4:00 P. M.—Retinopathy Especially in Diabetes	Dr. P. G. Jenkins
4:00- 5:00 P. M.—Pathology of Diabetes & Its Complications	Dr. H. R. Pratt-Thomas
5:00- 6:00 P. M.—Clinico-Pathological Conference	Departments of Medicine and Pathology
8:00 —Smoker & Roundtable Discussion	Francis Marion Hotel

FOUNDER'S DAY PROGRAM**THURSDAY, November 1, 1951**

9:00-10:00 A. M.—Experiences with Surg. Treatment of Cong. C-V. Dis.	Dr. E. F. Parker
10:00-11:00 A. M.—General Practice Aspects of Urology	Dr. Robert Lich, Jr.
11:00-12:00 A. M.—Malignant Neoplasms of Early Life	Dr. James B. Arey
12:00- 1:00 P. M.—Recent Advances in Cancer Research	Dr. C. P. Rhoads
2:30- 3:30 P. M.—Eclampsia	Dr. Frank R. Lock
3:30- 4:30 P. M.—Acute Cholecystitis	Dr. Nathan A. Womack
4:30- 5:30 P. M.—Rheumatic Fever	Dr. T. Duckett Jones

THURSDAY EVENING

Guest speaker at the Founder's Day Banquet, Major General George E. Armstrong, Surgeon General of the United States Army.

The Journal of the South Carolina Medical Association

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OCTOBER, 1951

SPIRITUAL DISEASE

How is the nation's health? To none should this question be of more moment than to the physician for it is he who devotes his working hours to matters of health. It is true that he is of necessity concerned primarily with matters of physical health but he is a poor physician if he fails to consider the patient as a whole.

How is the nation's health—physically, intellectually, economically, socially, spiritually? It would be difficult to find a magazine or newspaper today or to listen to the radio for any length of time without reading or hearing comments on or discussions of this all important question. And the opinions of speakers and writers are so varied that one is at a loss to draw specific conclusions as to the welfare of the country in its entirety.

In one realm, however, there seems to be a gradually developing belief that things are far from healthy—we refer to the spiritual health of the nation. The symptoms of spiritual disease are not hard to find. The special investigating committee of the Senate has brought to light the hold which crime has upon our legislative and social life. The mink coat, five percenters, and R. F. C. loans are outward signs of an inner laxness of morals in our national government which have lead Herbert Hoover to exclaim, "We have a cancerous growth of intellectual dishonesty in our public life." The selling out of basketball games and the dismissal of a group of West Point students for cheating have shocked the educational and athletic world. The widespread peddling of marihuana cigarettes to boys and girls has been uncovered. Disregard for the sacredness of marital vows has resulted in a continuing increase in the divorce rate. The people of this country have become so concerned with their search for pleasure that last year they spent over four times as much for alcoholic beverages as they did for religion and welfare activities. And, to the shame of the profession, physicians are being accused more and more of placing financial reward ahead of service in their dealings with patients. These are but a few of the signs and symptoms which we could mention.

If the disease is spiritual—and of this we are convinced—the treatment must also be spiritual. The enactment of more stringent laws may help to protect the innocent but it will not cure the disease itself. Adoption of codes of ethics for legislators and governmental administrators may help to separate the sinners from the upright but it will not affect the underlying malady. Severe penalties or stiff income tax provisions for gamblers may make gambling more difficult to hide but it will not cure the curse of gambling. Grievance committees may make the greedy physician cut down on his charges, but they will not remove the greed from the soul of the physician himself.

The only remedy which if of any avail—and to this history bears eloquent testimony—lies in a change of heart. And we are but adding our voice to a host of others when we say that the greatest need of our country today is a spiritual rebirth, a return to God and to his eternal principles. And the change must come in the heart of the average citizen—the butcher and the baker, the farmer and the business man, the lawyer and the laborer, the mechanic and the physician—for it is he who ultimately determines the course of the nation.

True though this may, some may say, why should it be discussed in a medical journal? Is it not the prime concern of the church and the clergy and should we not leave such matters to them?

The answer is obvious. Before we were physicians we were citizens and as such we should be deeply concerned with the health of our nation. The church and the clergy should be in the vanguard but the task is not for them alone—their hands must be upheld and their efforts strengthened if we are to save our nation from spiritual lethargy and eventual spiritual death. And if one desires to know what happens to a nation when it becomes spiritually dead he need but read the history of the Roman Empire.

Most physicians we have known are men of high principles and are recognized as such in their communities. Many of these physicians hold strong re-

ligious beliefs and yet, for some reason, they tend to shy away from expressing their convictions except in private conversation with intimate friends. As a result the public is prone to regard physicians, as a group, as men with good moral character but men who are luke-warm toward religion itself.

What would happen if the thousands of physicians in this country who are members of religious organizations would suddenly decide to wage an all out fight against spiritual disease as they are now fighting against physical disease? What would happen if the same group of men were to let the people know the principles for which they stand and the beliefs which they hold? We do not know, but we are sure that the effect would be far beyond our imagination. It might well be the spark which would halt this nation in its present course and turn it toward the spiritual rebirth which is so sorely needed. It is a challenge with which we are faced, an opportunity which may never be ours again.

VOLUNTARY HEALTH INSURANCE

Reflecting the continuing desire of Americans to choose their own methods of meeting the costs of illness, all forms of voluntary health protection scored tremendous gains in 1950 to set new records, the Health Insurance Council recently reported its annual Survey of Accident and Health Coverage in the United States.

The report by the Council, which is made up of nine trade associations in the life and casualty insurance fields, indicates that at least half of the nation's population at the end of last year was covered by one type or other of voluntary protection against the economic hazards of sickness and accident.

Hospital expense protection, which covers the largest number of people, was extended to 76,961,000 persons at the close of 1950. This total was 17 percent greater than the figure of 66,044,000 just a year before.

Growing public appreciation of the advantages of voluntary health protection can be seen in the fact the number of people against hospital costs has more than doubled since the end of World War II.

Great strides also were made by surgical expense and medical expense coverages in 1950. Protection against surgical expense was provided to 54,477,000 persons at the end of last year as compared with 41,143,000 a year earlier, or an increase of 32 percent. A year-to-year gain of 28 percent was recorded by medical expense protection which covered 21,589,000 persons in 1950 and 16,862,000 in 1949.

Both surgical and medical coverages also have shown large postwar gains, with the 1950 number of persons in each case being more than quadruple the 1945 totals.

Protection against loss of income due to disability,

or weekly indemnity insurance as it is more popularly known, also increased during 1950. Such protection was provided to 37,293,000 persons when the year ended against 34,136,000 at the end of 1949, or a gain of 9 percent. The 1950 total is equivalent to approximately 60 percent of the employed civilian population entitled to such benefits at the year-end. The figures given do not include individuals covered solely by government insurance under compulsory plans.

The figures given in the survey cover various types of insurance companies, Blue Cross, Blue Shield, fraternal bodies, local medical societies, industries, universities and others, to the extent that information and data have been made available to the Council.

POSTGRADUATE STUDY FOR THE G. P. TO BE THEME OF A. M. A. SESSION

Postgraduate study primarily designed for the general practitioner will be the theme of the 1951 Clinical Session of the American Medical Association to be held in Los Angeles, December 4 through 7.

"Therapy will be stressed in a broad presentation of clinical studies on problems the general practitioner meets in daily practice," Dr. George F. Lull of Chicago, secretary and general manager of the A. M. A., stated. "Subjects of interest to the specialist will also be presented."

The four-day scientific program will include discussions and presentations on urology; general practice; general surgery; cardiovascular diseases; industrial medicine and surgery; eye, ear, nose and throat diseases; diseases of the chest, and neuropsychiatry.

Others will be on medical banks, radiology, anesthesia and pathology, traumatology as related to civil defense, obstetrics and gynecology, dermatology, internal medicine and pediatrics.

"In addition," Dr. Lull added, "practical clinical discussions, scientific exhibits and general lectures on basic problems are planned."

Color television to demonstrate surgery, clinical treatment and examination procedure will be one of the highlights of the convention, according to Thomas G. Hull, Ph.D., Chicago, director of the scientific exhibit.

"The scientific exhibits will include those on cancer, diabetes, heart disease, obstetrics and gynecology, pediatrics, internal medicine, surgery, dermatology and others of interest," Dr. Hull stated.

Registrants will be afforded the opportunity of spending many pleasant and profitable hours examining the latest in medical books; instruments and apparatus; infant, special purpose, and general foods; achievements of pharmaceutical manufacturers, and miscellaneous commodities useful in everyday practice.

"Physicians may solve many troublesome problems by conferring personally with the qualified men and

women in attendance at the technical exhibits," Thomas R. Gardiner of Chicago, director of the technical exhibits, said.

Both the scientific and technical exhibits will be located in the Shrine Convention Hall, adjacent to the Al Malaikah Temple, where the lectures, clinical presentations, television reception and motion picture showings will take place. Approximately 2,100 lineal feet of space will be used for exhibits, with about 165 firms having technical displays.

In addition to the activities planned for the physicians attending the session, special interesting and diversified activities have been planned for wives accompanying their husbands.

More than 2,000 hotel rooms have been reserved for attending physicians planning to attend the session. Doctors, however, are urged to make their hotel reservations in advance by writing to Chairman, American Medical Association Subcommittee on Hotels, 1151 South Broadway, Los Angeles 15, Calif.

IT'S A BIGGER RED FEATHER . . .

The Red Feather, service symbol of more than 15,000 volunteer health, recreation and welfare services, is a bigger Red Feather this fall because it includes not only Community Chests but the United Defense Fund as well.

When you give your share through your town's UNITED RED FEATHER CAMPAIGN, you contribute to your own local Red Feather services, to the USO and to the emergency health and welfare agencies that provide help to people wherever defense efforts create special problems.

It's a bigger Red Feather than ever before and it needs your help more than ever before. GIVE GENEROUSLY to your UNITED RED FEATHER CAMPAIGN.

MINUTES OF MEETING OF COUNCIL

August 10, 1951

At the call of the Chairman, Dr. O. B. Mayer, Council met in special session at the Columbia Hotel, Friday afternoon, August 10, 1951. The following were present: O. B. Mayer, M.D., Lawrence P. Thackston, M.D., J. P. Cain, Jr., M.D., C. S. McCants, M.D., Lesesne Smith, M.D., J. C. Sease, M.D., Julian P. Price, M.D., J. W. Chapman, M.D., and M. L. Meadors. Also present by invitation were: Dr. W. R. Wallace, Chairman of the Executive Committee of the State Board of Health, Dr. J. I. Waring and Dr. Harry Mustard.

Dr. Mayer opened the meeting with a brief explanation of its purpose. He stated that since the last meeting of Council, he and Dr. J. D. Guess, President of the Association, had called on Governor Byrnes and had been told by the Governor that he would welcome constructive suggestions which the Council might

have to make with respect to the situation created in the Department of Health by the recent special order of the State Budget and Control Board. Having since learned that Dr. Harry Mustard, an authority on public health work, was in the State, Dr. Mayer explained that he, after consulting with certain other members of Council, had decided to call the meeting and invite Dr. Mustard to attend.

Dr. Mustard was requested to give the Council the benefit of any suggestions he might have to make. He spoke briefly and stated principally that he would like to offer two bits of advice: First, he advised against any precipitate action by the Council or the Association; and second, that arrangements be made for a professional study of the organization and performance of the public health system in South Carolina.

A general discussion ensued in which most of the members took part. Dr. Wallace was then invited to make a statement and did so, pointing out principally the disruption of activity which had been brought about in the Department of Health by the action of the Budget and Control Board.

On motion, duly made and carried, the Council then went into executive session.

Upon the adjournment of executive session, Dr. Mustard was recalled and requested to make such study of the Health Department as his time permits during his current stay in South Carolina, and to give the Council the benefit of his advice and suggestions after completing such investigation. Dr. Mustard consented to do this, stipulating however that he would accept no compensation for such services. The Chairman, however, made it clear that Council would defray any expenses incurred.

A committee of five was appointed by Council to assist and consult with Dr. Mustard upon his call, in connection with the study to be made. The committee named consists of: Dr. Mayer, Chairman, Dr. Wyatt, Dr. Cain, Dr. Waring and M. L. Meadors. It was agreed that any expenses incurred by the committee likewise would be paid by the Association.

Dr. Waring, Chairman of the Committee on Infant Mortality, requested the allowance of a reasonable sum for the expenses of the activities of his committee. On motion of Dr. Price, seconded by Dr. Wyatt the Treasurer was authorized to defray the committee's expenses to the extent of \$150.00, if that much should be necessary.

Dr. Mayer then inquired as to the more suitable days of the week for holding the meetings of Council. After a general discussion, it appeared that Wednesday was convenient to most members, and it was agreed that in the future, Council meetings, whenever possible, would be held on Wednesdays.

There being no further business the meeting adjourned.

M. L. Meadors
Acting Secretary

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

"THOUGHT" DEFENSE

The New York Times in a recent Sunday issue, took note of a movement instituted in our sister state to the North, which seems to point the way in a very logical approach toward the solution of some of our current problems.

The head of the University of North Carolina's Philosophy Department and some of his colleagues believe that all of our preparations for defense should not be confined to merely military or material provisioning. They have developed a program of attacking Communist ideas by exposing them and their implications.

The program is built upon the theory "that the United States is in more danger from ideas of Communism than from Communist military forces." While many people may have had the same idea, the North Carolina group seem to have been among the first to take it out of the category indicated by Mark Twain in his classic observation about the weather. They are trying to do something about it.

According to the Times, "The educators began their campaign last winter and have built it to the point where it can be disseminated over the entire state. Convinced that public school teachers have the best opportunities to stimulate and lead the thinking of a community, the philosophy department brought a selected group of North Carolina teachers to the university for a week of study and discussion.

"The week of study was known as the 'Free World Workshop,' and during that period speakers from the University of North Carolina, Duke University and the state Department of Public Instruction led discussions on various aspects of democracy and communism. The university cooperated by awarding scholarships to cover expenses of the forty teachers who were selected on the basis of interest and community leadership qualities.

"The teachers, in turn, have returned to their various communities where they will build 'anti-Communist cells.' The university will cooperate with local communities by providing speakers throughout the year who are considered authorities on various aspects of communism and democracy."

In view of the criticism to which the University of North Carolina has been subjected by a number of people within the past few years because of its liberalism (criticism with which this observer has never been able to agree), it is especially gratifying to admirers of that great institution to find a movement such as this being instituted there. Its importance is attested by the recognition given it by its appearance in the New York Times. We hope it will be a definite answer

to the criticism of those who have professed to see an opposite trend at the institution.

Perhaps the idea has already begun to emanate rather widely or perhaps it was merely coincidence that within the same week in which the article appeared in the Times, we heard very much the same general thought expressed by a speaker from Miami, Florida. It sounded like a good idea then and it still does. The people generally need to be educated on this as well as on other public issues. When their thoughts are right, their actions will follow in the same channel.

Dr. E. M. Adams expressed it accurately, as reported in the Times, when he said: "... it is essential that educators and citizens generally get off the defensive and regain the initiative." He stressed: "We must make democracy work at home, enlighten ourselves about the issues involved, teach others the truth about communism and democracy, and create situations of strength—spiritual, moral, educational, political and economic, as well as military."

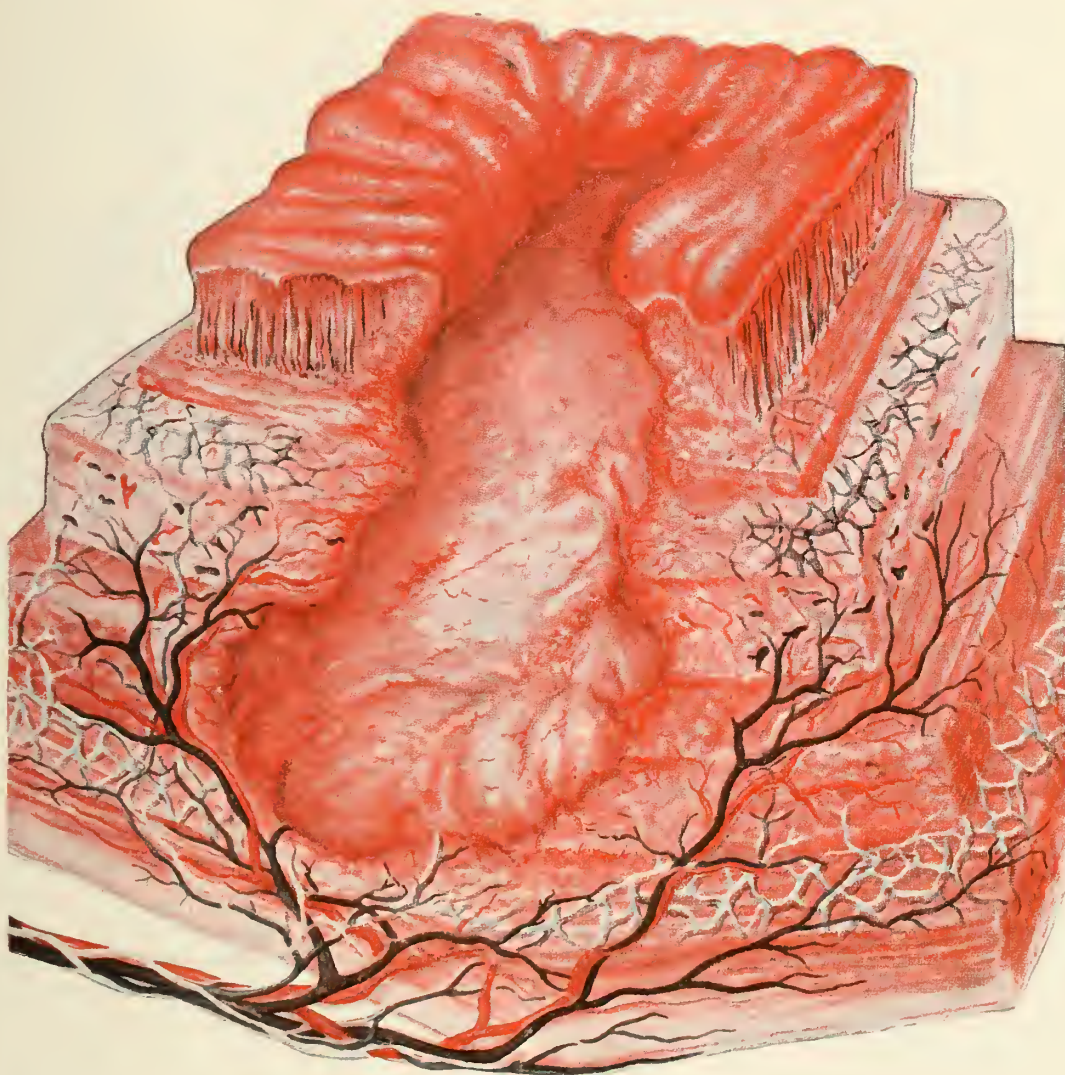
BRITISH ELECTION ORDERED FOR OCTOBER 25TH

Announcement in the press of Prime Minister Atlee's statement of his Party's decision to recommend a general election and its approval by the King, was an important development in the news of September 20th. He pointed out that the Government's program had been carried out since the last elections some months ago with only a bare majority in Parliament and pointed out the desirability of another vote of confidence with the hope of securing an adequate majority in the House of Commons.

The past year has not been entirely a bed of roses for the Labor Party and dissensions have developed within its own ranks, interestingly enough one of these being over the course which the British Government's health program should take.

The World situation being what it is, with the British position in Iran seriously threatened and other developments in the making on the Continent, not simply the British Empire but the entire World will watch with interest the campaign and the fortunes of Britain's Labor Government in October.

Winston Churchill, Conservative leader, was reported as having immediately called a meeting of his "shadow Cabinet," the men who would become the real Cabinet in the event of Conservative victory. The Laborites have been in power since 1945 and if the British people follow a trend which has certainly developed, they may well decide to return the Conservatives and Churchill to power now that the military situation continues to grow more serious.



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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

MEMBERS 70 AND OVER NOW EXEMPT FROM PAYMENT OF A. M. A. DUES

Physicians 70 years of age or over who are members of the S. C. State Medical Association will be exempted from American Medical Association membership dues if such physicians request exemption.

This rule was voted by the House of Delegates at the June meeting of the A. M. A.

Requests for exemption should be filed by the eligible physicians directly with the Chicago Office of the A. M. A. Those who have paid 1951 A. M. A. dues will receive a refund if they file a request for exemption and they meet the "70 year" rule. Such physicians will be automatically exempted from payment of A. M. A. membership dues in the future so long as they maintain their membership in the State Association.

Remember: Exemption will be made only "on request" and such request should be filed directly with the A. M. A. Office in Chicago.

Other classes of physicians are not exempt from payment of A. M. A. dues unless their state association exempts them also from at least a part of State dues.

REPORT OF PHYSICIANS' INCOME AVAILABLE

The U. S. Department of Commerce which recently conducted, with the cooperation of the American Medical Association, a survey of the income of physicians over the country, is taking steps to provide for the distribution of the report of the results.

The report is incorporated with the Department's monthly survey of current business which is distributed on a subscription basis to business firms throughout the country. A letter just received from the Charleston office of the Department of Commerce advises that reprint from the publication, showing the results of the survey in the medical field, has just been issued, and are available for 15c per copy.

At the Department's request a copy of the Directory of the South Carolina Medical Association is being furnished and in turn it is understood that the Department will send to each of the members a letter with coupon for placing an order for the copy of the reprint. The results of the survey have already been announced and doubtless have come to the attention of most of the members of the Association. A copy of the report in detail could prove valuable as a source of information to the doctors of South Carolina and elsewhere.

MICHIGAN CHIROPRACTORS TURNED BACK

The Michigan State Medical Society has called attention to an opinion rendered by a Circuit Judge in that State which may be of interest in South Carolina and other states where chiropractors are licensed.

The litigation was instituted by a chiropractor against the Trustees of Grandview Hospital in Ironwood, Michigan. Criminal charges were pressed by

the chiropractor who claimed that the Trustees discriminated against him and wilfully neglected to perform duties while holding positions of public trust when they refused him the use of Grandview Hospital for his chiropractic practice.

Here are the salient points of Judge Landers' decision:

1. . . . "a public officer cannot be subjected to criminal prosecution for failure to perform duties which require the exercise of discretion on his part, where there is no element of an evil or corrupt design in his conduct."
2. The chiropractor "claims to be a practitioner of a school of medicine, . . . but we are referred to no statute or case where the legislature or a Michigan court has ever defined the meaning of the term 'school of medicine.'"
3. . . . "To uphold the informations and force the defendants to trial in these cases would be legislating that the term 'school of medicine' included a school where chiropractic was taught."
4. Under the terms of Act 350, Public Acts of 1913, the Board of Trustees were given the authority to determine rules for the hospital. The rules state that no person shall practice medicine in the hospital unless he has a license from the State of Michigan to practice medicine.
5. Charges against the trustees were dismissed.

INCREASING NUMBER OF "FOREIGN" DOCTORS PASS EXAMINATIONS FOR U. S. LICENSE*

Chicago, July 25.—There were 209,040 physicians in continental United States on December 15, 1950, according to the annual medical licensure report of the American Medical Association.

This is an all-time high record. This number was a net gain of 2,208 in the physician population since 1949.

More doctors educated in foreign countries are appearing before American boards for licenses, and although the percentage of failures is large, the number receiving licenses is on the upgrade.

In 1950 successful examinations were taken by 359 graduates of foreign medical schools outside of Canada. This compares with 319 in 1949 and 308 in 1948.

To aid examining boards, the A.M.A. Council on Medical Education and Hospitals and the Executive Council of the Association of American Medical Colleges, have prepared a list of foreign medical schools whose graduates may be considered on the same basis as those of approved United States schools.

Twenty-seven foreign medical schools are now on the approved list, which has been adopted by 23 licensing boards.

*Reprinted from the Wisconsin Medical Journal, August 1951.



Two of these physicians suspected the worst...

but not until the significance and the incidence of amebiasis were thoroughly revealed at a hospital staff meeting. This meeting was held in a large city well north of the Mason-Dixon line, hardly a "tropical" climate, yet the incidence was high.*

The two staff men recognized that the symptom pattern of amebic dysentery fitted their experience of several months past and stool examination revealed that they, too, had amebiasis. A course of treatment for these physicians with Milibis-Aralen was completely successful.

Milibis — bismuth glycolylarsanilate — has

given excellent results in thousands of cases. In 82.6% of patients followed parasitologically for prolonged periods, negative stools were obtained consistently after 1 to 4 courses of Milibis.

Because intestinal amebiasis may be complicated by extra-intestinal involvement, it is recommended that Aralen (chloroquine) diphosphate be employed in addition to Milibis for the treatment of all cases of amebic infection.

Illustrated booklet available on request.

HOW SUPPLIED:

Milibis, tablets of 0.5 Gm., bottles of 25,
Aralen, tablets of 0.25 Gm., bottles of 100.

MILIBIS[®] *amebacide...high in potency...low in side effects*
ARALEN[®] *...for extra-intestinal amebiasis*



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TAX EXEMPTION FOR RETIREMENT INSURANCE PREMIUMS FOR MEMBERS OF PROFESSIONAL, AND OTHER ASSOCIATIONS

Senator Ives (R.-N. Y.), on the floor of the Senate July 25, explained an amendment he introduced to the House-passed tax bill (H.R. 4473). The amendment would, under certain circumstances, exempt from taxation limited premium payments for retirement plans for members of professional and other specified associations—provided such plans have prior approval of the United States Treasury Department. Senator Ives explained such an exemption would correct an unfair situation. He pointed out that it was designed to bring relief to highly educated persons who are not covered by Social Security and who have, after prolonged schooling and training, fewer earning years than the average person now covered by Social Security. He said lawyers and physicians, for example, do not reach peak earnings until late in life. Physicians, he explained, reach their peak from ten to nineteen years after commencing practice. Increased rates of taxation take dollars from professional persons at a time when they should be setting funds aside for retirement years.

The Ives proposal permits eligible persons to pay each year—tax free—to an approved organization's retirement plan 10% of earned income, or \$7,500, whichever is less. Professional, business, and other associations would submit their retirement plans to the United States Treasury Department for approval. To be approved, such plans must provide that premiums could not be withdrawn voluntarily before retirement age (60). The insured, however, could draw benefits before age 60 for total and permanent disability. Upon retirement, the insured or his beneficiaries, could elect to take a lump sum payment or accept annual installments. Under the lump sum payment arrangement, the total amounts would be subject to a capital gains tax not exceeding 25% (present rate). Under yearly installments the insured or his beneficiaries would be subject to regular income tax payments.

Several other bills with similar objectives have been introduced in the House of Representatives previous to this time. None of them has been scheduled for consideration by House Committee on Ways and Means nor has there been any indication that they would receive attention this year. However, since Senator Ives has offered the idea as a Senate floor amendment to the tax bill, the question is thrust into immediate consideration and debate. In the event the Senate should accept the Ives amendment it would be considered by conferees from both Chambers along with the revenue bill.

House bills on the subject are: H.R. 4371 (Keogh—D.-N.Y.), H.R. 4373 (Reed—R.-N. Y.), and H.R. 3456 (Coudert—R.-N.Y.).

(From A. M. A. Washington News Letter August 2, 1951).

AFL PUTS ON DRIVE FOR FUNDS TO SUPPORT COMPULSORY HEALTH INSURANCE*

Chicago, Aug. 7.—Socialized medicine is far from being a dead fish on the beach, according to Dr. George F. Lull, secretary and general manager of the AMA.

He cites AFL President William Green's recent appeal to "all our 8,000,000 members and their families" to contribute to the Committee for the Nation's Health. Green is honorary vice-chairman for the committee.

In a full-page appeal in the AFL publication "The American Federalist," Mr. Green urged his union members:

"We of the American Federation of Labor are determined to preserve and extend our hard-won gains in social security, health and welfare. In this important activity our invaluable ally is the Committee for the Nation's Health, a group of distinguished physicians and laymen . . . Every contribution to the committee will help defeat the medical lobby's lies at the grass roots . . ."

Mr. Green pointed out that the AFL has pledged its support to national health insurance.

THE CASE FOR PRIVATE PRACTICE

Dr. Lindsey W. Batten

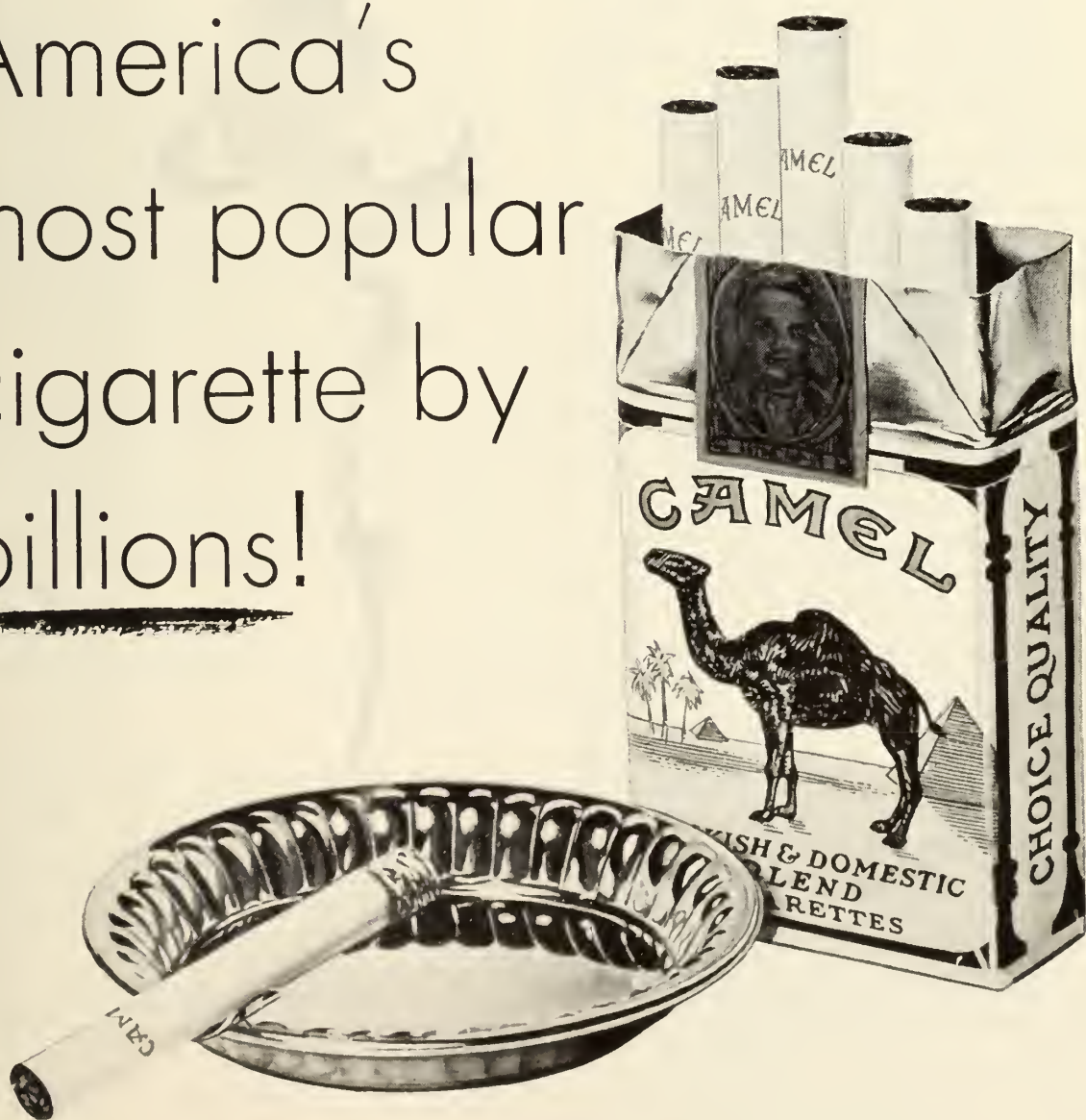
This article appeared originally in Bulletin 13, (June, 1951) of the Fellowship for Freedom in Medicine, 45, Nottingham Place, London, England.

"If," wrote Lord Beveridge (then Sir William), "a contribution for medical treatment is included in the insurance contribution, contributions will cover not 90 per cent but 100 per cent of the population. . . . The possible scope of private practice will (then) be so restricted that it may not appear worth while to preserve it." (*Italics mine.*) He went on to put it the other way—if we did want to preserve private practice no part of the weekly contribution to Social Security must go towards medical treatment.

I remember well the astonishment and the sinking of the heart with which I heard and afterwards read this passage. That the question "Is private practice worth preserving?" should be seriously asked seemed at once amazing and ominous. I waited for a debate or a reply, but none came. This was 1942. Doctors and patients had other things to think of. Private practice had been in the trough of the wave since 1939. Many doctors were in the Service; families and practices were broken up. Country doctors were smothered by "evacuees;" some town doctors had no patients left. The question was not put, debated or answered. It went by default. All political parties swallowed "Social Security" and "Assumption B" hook, line and sinker. The rest followed—the fatal contributions, the Appointed Day—and here we are in 1951 with private practice alive but sorely wounded and

*Reprinted from the Wisconsin Medical Journal, August 1951.

After all the
Mildness Tests,
Camel is
America's
most popular
cigarette by
billions!



the question still not put nor answered. "Is private practice worth preserving?"

Freedom for the Unqualified

One road to an answer is to suppose private practice completely extinguished, and to examine the position. For the sake of uniformity and in the supposed interests of social justice, the State might institute a monopoly of medical service, like its monopoly in broadcasting, and forbid private practice. This would almost certainly mean qualified practice, for unqualified practice is scarcely a candidate for State monopoly and is too nebulous and evasive for repression. What then?

Hitherto, and from remote times, any citizen has enjoyed, as a matter of course, the right to consult any other citizen about his health, to receive examination, advice and treatment and, if both parties agreed, to pay a fee for services rendered. He asks no leave, he informs no one, there is no third party to the transaction. This is private practice.

Under State monopoly there would be one kind of citizen the sick man could not consult in this way—the qualified medical man or woman. To "qualify" would be to lose the right to give medical aid to anyone by private agreement. The sanction and participation of the State would always be required. Only the unqualified could practice privately.

Here, surely, is the basic and sufficing reason for preserving private practice. True, we have lost our old taste for liberty. The phrase "This is a free country!" is no longer current among us. Yet it is hard to believe that our citizens, if their eyes were open, would agree to part with so fundamental a freedom or to tolerate so grotesque an injustice. But, freedom apart, the existence, on a substantial scale, of general practice outside the Service is, I submit, of immediate practical importance to all patients, all doctors and, not least, to the Service itself. It matters now, it will continue to matter. If the Service became "whole-time salaried" it would matter most of all.

Whole Categories of Patients Ignored

It ought to be more widely and frankly acknowledged than it is that there are whole categories of patients and of ailments for whom or for which the National Health Service, like its mother the Health Insurance, makes no serious attempt to provide. They are, broadly speaking, those classes of patient and ailment for which time, patience and an unhurried approach are essential. To these, successive Parliaments and Ministers of Health have turned a blind eye, disregarding their existence, or perhaps assuming, though never declaring, that the help needed is not "general practitioner service."

Among patients are the anxious and fearful, the very young and the very old; among ailments the whole class of functional disorders—dyspepsias, cardiovascular disturbances, allergies, psychosomatic disease in all its forms and, of course, very many organic diseases of the kind called "long cases" at examination

time by the Final M. B. candidate. The care of the young provides typical examples: the feeding problems of babyhood, not to be solved by a glance and a word, and the familiar behaviour problems of infancy—"not-eat-my-dinner," "not-go-to-sleep" or "wet-my-bed." If good is to be done in such cases and harm avoided, the mother must be seen first alone, then mother and child, then mother again.

Detection of Significant Symptoms

The comforting and relieving of the old, involving, as it does, patient attention to twice or many-times-told tales, repeated reassurances and the gentle, deliberate examination of those who cannot make haste and must not be hurried, is another example. So is the large field of personal preventive medicine and early detection of disease, so often emphasized by reformers, acclaimed as the medicine of the future and allotted especially to the family doctor. What it really implies deserves far more thought than it receives. In this field the doctor works of necessity on the unmapped, treacherous frontier between health and disease—far more difficult territory than that of curative medicine. Fully developed, declared disease is seldom hard to diagnose and can usually either be treated out of hand or at least be directed to the proper quarter. To distinguish the early, but significant, from the really trivial symptom or complaint, the small, true sign of disease from the individual peculiarity of no importance is as difficult as anything in the whole art of medicine. It is the easiest thing, in this type of work, to do harm while intending good; not only to overlook the early sign but to find or emphasize the sign of no importance and implant an anxiety sometimes impossible to eradicate.

No Time to Listen

If those responsible for the Health Service seriously intend that disease shall be caught early they must so arrange things that the general practitioner, who will see the patient first, shall have ample time to listen, to examine and to think and that the patient shall know he will have time. Otherwise, precisely the patient it is intended to help will stay away. It is notorious that at present, all too often, he does stay away knowing that the Service doctor has not the time; and it follows that, pending fundamental reform private practitioners must do this work if it is to be done on any considerable scale.

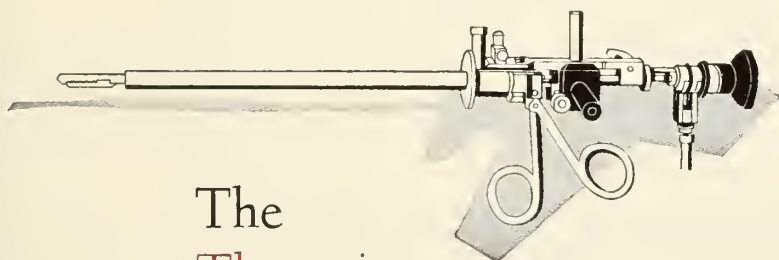
Exactly the same applies to all those many patients whose perfectly genuine bodily symptoms have their origin partly or wholly in unhappiness, anxiety or emotional conflict. There can be no short way with them. They must be allowed to tell it through, they must be completely examined, reasoned with and advised and the reasoning and advising must often be repeated on later occasions.

I cannot believe that either a quick brain (and I know I have a slow one), or an organized team (and I know I work as a unit), can reduce the time needed

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will find aureomycin of benefit in the complications of pneumonias refractory to other forms of therapy, particularly in those very serious forms caused by the staphylococcus or by *Klebsiella pneumoniae*. In the pneumonic involvements of psittacosis, tularemia, rickettsial disease or mucoviscidosis, aureomycin is highly effective. It is also very useful in the ambulatory or surgical management of bronchiectasis. Multiple lung abscesses have been known to heal with aureomycin treatment alone. In operative thoracic procedures, aureomycin is invaluable.

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to deal fairly with these patients to, say, 15 minutes for a first session and 5 minutes for later ones. It simply will not do. Nor can I agree that the help they require is not general practitioner but specialist or clinic help. The map for them is not the endocrino or cardio-logist, the paed-, psych or ger-iatrist or—iatrieian (shades of Liddell and Scott!) but one, good, unadjectived doctor of their own with time and an undivided mind.

I am sure there are within the present Service, as formerly in the National Health Insurance Service, able and devoted doctors who somehow contrive to provide what is needed. They deserve more honour and longer lives than they are commonly granted, but it is idle to pretend that, with lists at 4,000, capitation fees at 17s. and taxes at their present level, men below superman grade, with families to support, can do this work as it should be done. The State does not make, and so never has made, a serious attempt to enable them to do it.

This Tradition May Perish

If "the hungry sheep," looking up, are to be fed, if the "homely slighted shepherd's trade"—the art of general practice—is to survive, then the task must fall at present to private practitioners. They can at least satisfy the medical needs of some and keep the candle burning. But let us face the fact that it can only be some, not all, and that these "some" must, as things stand, be those who are prepared to pay twice for their medical attention and have the means to do so. This, it will be said, is unfair. Of course it is. But there are two relevant comments to be made. First, in a mixed practice with more "private" than "panel" patients it was possible before "the day," to give good and equal service to them all. Secondly—and of far more general application—if a minority, but not a negligible minority, receives the best we have to give there is hope that others will demand and eventually receive it too; if none, or too few to count receive it, it cannot spread. The standard is lost, the very memory of the thing perishes, the candle goes out. I do not believe this candle could ever be re-lit.

Dangers of Whole-time Service

The case for private practice as a friend of the National Health Service at once adjuvant and stimulant, filling gaps and, by wholesome competition, raising its standards, could be greatly extended, but something must be said of it here as a protector of professional freedom. There can be no need, in this Bulletin, to enlarge on the dangers of whole-time service to the individual doctor's freedom—his right to decide, to speak and to act as he thinks he ought. It must be familiar to all who have worked for the State or for public bodies. The danger of whole-time service

is, of course, its whole-tineness. Have an alternative part-time occupation and you are vastly strengthened in standing up to direction and regulation. "If they persecute you in one city flee unto another." Private practice is one of the profession's few remaining "other cities." For our own sakes, our patients' and the art's, let us not lose it.

These are the chief reasons, as I see them, for preserving private practice and they seem to me extremely cogent. I am sure that a true "Welfare State" a State concerned to maintain and improve the welfare of all its members living and to be born, would regard the private practitioner — granted only that he was working honestly and well—as a most valuable citizen, to be not merely tolerated but actively encouraged and helped.

The case for private practice is strong, even compelling, and urgent. Surely it is time for our profession to adopt it more whole-heartedly and to press it far more insistently on the public and on those in, or likely to be in, authority.

CHILDREN'S DENTISTRY IN ENGLAND

"The British Ministry of Health announced recently that Parliament would be asked to approve a bill authorizing dental nurses to extract and fill children's teeth. The Health Ministry said the bill was proposed because the majority of dentists in the school dental service has resigned to be eligible for the higher fees the government paid for dental services for adults. The government said the plan would follow the program in New Zealand under which 85 percent of New Zealand's children from 3 to 13 receive nearly all dental care from government-salaried dental nurses with two years of training. Observers reported that the move was not unexpected. In a recent editorial in the Dental Record, official British organ of seven dental societies, the magazine said: "The ghost of the school dental service will haunt the corridors of the (health) ministry for a long time to come and already it has raised the demons and hobgoblins of dilution and a half-trained professional staff." Under Britain's National Health Service, the dental health of children has been increasingly neglected in a mass repair program for adults. The question of providing even the limited training that would be required for dental nurses faced difficult sledding. The London Daily Mail reported that dentists believed it impracticable. One official of the British Dental Association was quoted as saying: "The snag arises in training. Staffs in dental schools are already overworked because of the increase in the number of students."

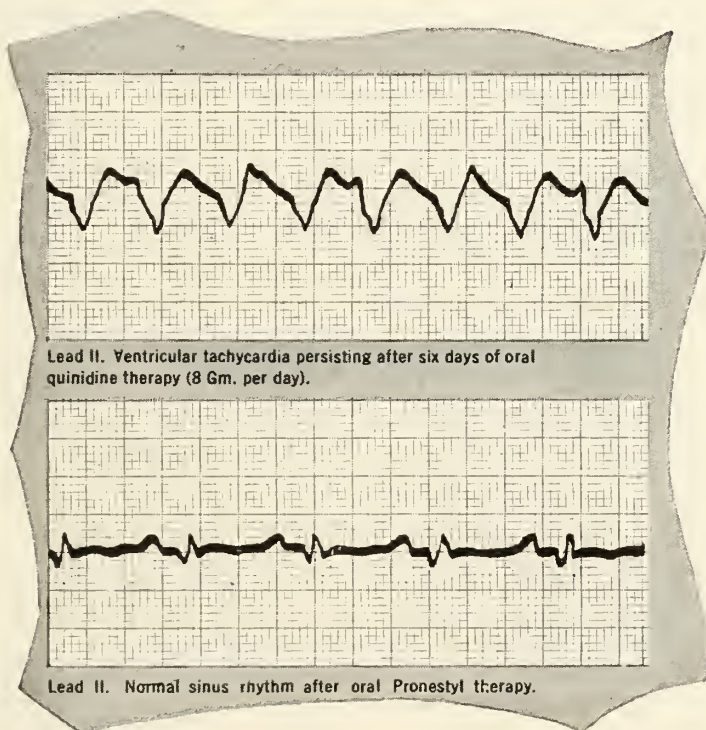
American Dental Association News Letter July 1, 1951 (As quoted in Public Health Economics August, 1951)

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DEATHS

MARY BAKER BLACKBURN

Dr. Mary Blackburn, widow of the late Dr. R. G. Blackburn, died at her home near Marion on September 3.

A native of South Carolina, Dr. Blackburn received her education at Winthrop College and The University of Nashville Medical School (Class 1899). Returning to her home state she was resident physician at Winthrop and then entered private practice in Columbia. In 1911 she married Dr. R. G. Blackburn and moved to Marion where she assisted her husband in his general practice. Following his death she retired from practice. She is survived by one son.

PETER ALEXANDER BRUNSON

Dr. P. A. Brunson, 74, of Ridge Spring died in a Camden hospital on September 10 after a prolonged illness.

A native of Darlington, Dr. Brunson received his medical education at the University of Virginia (Class 1906). Returning to South Carolina he opened his office at Ridge Spring where he carried on general practice up to the time of his last illness.

Dr. Brunson was not only a faithful family physician but was also a leader in his community and a devoted churchman. At the time of his passing he was recognized as one of his communities most beloved citizens.

Dr. Brunson is survived by his widow, the former Miss Adeline Hay Keith, five daughters, and one son, Dr. Joseph W. Brunson of Camden.

ARCHIE B. HOOTON

Dr. Archie B. Hooton, 63, of Olar died in a Columbia hospital on September 1.

A graduate of the Medical College of S. C. (Class 1911). Dr. Hooton spent his professional in health work and served as county health officer in Darlington and Allendale counties, and also worked for a period in Maryland. For the past few years he had been in poor health.

Dr. Hooton is survived by his wife, the former Miss Bessie Pooser, two daughters, and one son.

LONNIE MALCOLM McMILLAN

Dr. Lonnie M. McMillan, 63, died at the Mullins Hospital on September 2 after an illness of nine years.

Dr. McMillan received his education at Wake Forest College and at the Medical College of S. C. Following a period of internship at Roper and The McLeod Infirmary he entered the army and served as field surgeon with the 117th Engineers in France during World War I. Following his discharge from service he opened offices for the practice of surgery in Mullins. It was largely through his efforts that The Mullins Hospital was founded and he served as Chief Surgeon until illness forced his retirement in 1942. He also founded the School of Nursing which was named in his honor.

Dr. McMillan is survived by his widow, three sons, one daughter, two sisters, and four brothers, among whom are Dr. C. D. McMillan of Mullins, and Congressman John McMillan of Florence.

JAMES TINDALL QUATTELBAUM

Dr. James Quattelbaum, 49, died at the Columbia Hospital on September 5 following an extended illness.

A native of Columbia, Dr. Quattelbaum was graduated from Wake Forest College and from the Medical College of S. C. (Class 1927). He served a fellowship at the Polyclinic in Memphis and then returned to his hometown where he entered the practice of internal medicine. For several years he was associated with the Veteran's Hospital in Columbia.

He volunteered for military service and served as a lieutenant commander with the Navy in the Pacific for two years.

An assiduous student, Dr. Quattelbaum was in frequent attendance upon clinics and special courses throughout the country.

Dr. Quattelbaum is survived by his widow and one son.

HUGH EVELYN WYMAN

Dr. Hugh Wyman of Columbia died suddenly while visiting his son at Highlands, N. J. on September 2.

A native of Estil, Dr. Wyman received his education at Davidson College and at the Medical College of S. C. (Class 1925). Following an internship at Roper Hospital he moved to Columbia in 1927 to engage in the practice of urology with his brother. In 1938 he went into practice for himself, and continued in this work up to the time of his death.

Dr. Wyman is survived by his widow, one son, and one daughter.

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SOUTHERN MEDICAL

Annual meeting of the Southern Medical Association at Dallas, Texas, November 5th-8th, 1951.

Each doctor's wife in South Carolina is invited to attend the 45th annual meeting of the Southern Medical Association which will be held at Dallas, Texas, November 5th to 8th, 1951.

A very interesting program is being arranged for the visiting ladies. Make plans to bring your wife.

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NEWS ITEMS

PIEDMONT PROCTOLOGIC

The Piedmont Proctologic Society held its annual August meeting in Asheville, N. C., at the Battery Park Hotel. Dr. C. Ross Deeds of Hendersonville, N. C., president, presided over the business session and the election of officers for the coming year. Those elected were President, Dr. J. Milton Stockman of Knoxville, Tennessee; Vice-President, Dr. Charles S. Drummond of Winston-Salem, N. C.; and Secretary-Treasurer, Dr. B. Richard Jackson of Raleigh, N. C.

During the scientific session, the following papers were presented; "The Incidence of Postoperative Complications in Anorectal Surgery," by Dr. B. Richard Jackson, "Anesthesia in Proctologic Surgery," by Dr. William Galvin of Emory University Medical School, Atlanta, Ga., and "The Reduction of Postoperative Pain after Rectal Surgery," by Dr. Edgar Boling of Atlanta, Ga.

Dr. Malcolm L. Marion, formerly of Chester, has left for overseas duty with the 433rd Troop Carrier Wing. Dr. Marion is a First Lieutenant.

Dr. Charlotte R. Kay has opened an office in Liberty where she will do general practice.

Dr. Tom Brockman of Greenville has announced the association of Dr. W. Clough Wallace, formerly of Spartanburg in the practice of proctology.

Dr. Harry C. Bagby has returned to Chester from Korea where he was with the Army Medical Corps serving when the war started. He expects to practice in Chester.

Dr. Samuel W. Lippincott, formerly of the Lahey Clinic, is now practicing roentgenology in Charleston.

SEVENTH DISTRICT MEETING

The annual meeting of the Seventh District Medical Society was held at the Rusty Ann Lodge, near Georgetown, on Thursday, September 20. The attendance was good and the fellowship excellent.

The following scientific program was presented: "Problems Connected With the Diagnosis and Treatment of Thyroid Disease," Dr. William H. Prioleau, Charleston, S. C.

"Certain Aspects of the Study of Infertility," Dr. C. D. Davis, Department of Obstetrics and Gynecology, Duke University, Durham, N. C.

"A Review of Pathologic Diagnosis," Dr. Kenneth M. Lynch, President of the Medical College of the State of South Carolina, Charleston, S. C.

"Coronary Disease," Dr. O. B. Mayer, Columbia, S. C.

"Respiratory Allergy," Dr. William Weston, Jr., Columbia, S. C.

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The Journal

of the

South Carolina Medical Association

VOLUME XLVII

November, 1951

NUMBER 11

Scopolamine in Obstetrics

Use in Rapid Births, Premature Births, and Cesarean
Sections

Control of Restlessness With Apomorphine in Full
Term Deliveries

H. F. SHARPLEY, JR., M. D., M. Sc. (Ob. & Gyn.)
Savannah, Georgia

What has become of the high forceps? What has become of the mid forceps? Possibly there is less hesitancy toward performing a cesarean section as there is a greater degree of safety provided today, combined in improved anesthesia, the better selection of cases (consultation), the elimination of the classical section and the use of the antibiotics. However, the real answer is that greater relaxation in labor has displaced their use. In the last twenty years, the use of high and mid forceps has decreased to a rarity while conservatism extended through relaxation in labor has crept upon us. By no means is this great movement overshadowed by any retrograde movement such as an increase in the use of forceps invoked by the caudal and spinal anesthetics. Because the lay magazines¹ have sharpened and blurred the situation, advocating this or that technique and drug combination changing from one to another like fashions, the general public and possibly the profession itself may not have realized how much our obstetrical care has improved with greater relaxation in labor alone.

This great conservative movement has resulted in a marked improvement in our maternal mortality rate in the last decade, decreasing 71% in the United States.² To this we might add, a decrease in the risk of death from maternal causes because the number of births increased 56% in the same corresponding period of time.

This great conservative movement was born during the height of the surgical era, not to distract from the good that that era had produced but to pare down its innocent evil of extensive unnecessary surgery in obstetrics which it carried along with it. Likewise today—is there not being born a movement to pare down the extensive unnecessary use of drugs with their

ill effects on the "newborn" which this great conservative movement brought along with it?

From this general viewpoint, in 1948, a total of three and a half million births occurred, according to the National Office of Vital Statistics.² Only 5.3% were delivered by midwives or other attendants, whereas 94.7% were delivered by physicians. Whether or not the 9.1% delivered by the physicians at home received any medication or not, it is reasonable to assume that the 85.6% of the three and a half million women delivered in the hospitals in the United States by physicians, received an enormous amount of amnesia, analgesia and anesthesia.

Slide I

NUMBER OF LIVE BIRTHS AND PERCENTAGE
DISTRIBUTION BY PERSON IN ATTENDANCE:
UNITED STATES, 1935-1948

Year	Total Births	PERCENT ATTENDED BY		
		Physician		Mid- wife other and not speci- fied
		in hospital	not in hospital	
1948	3,535,068	85.6	9.1	5.3
.
.
.
1935	2,155,105	36.9	50.6	12.5

It is assumed that all births in hospitals or institutions are attended by physicians.

No single method known today is completely satisfactory.¹ Searching for an ideal, a specific—the literature is abundant. The search goes in circles.

¹Presented by invitation at a meeting of the South Carolina Medical Association, May 17, 1951 at Myrtle Beach, South Carolina.

CHEMISTRY

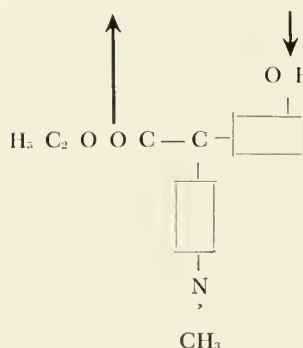
In the past decade much acclaim was made for the superiority of one form of barbiturate over the other. In the end, the shorter acting³ barbiturate such as "seconal sodium" is preferred in most instances to the longer acting barbiturate such as "amytal" with its corresponding respiratory depressing action being carried on to the end of labor—to the newborn.

In this decade the chemical investigation of new synthetic analgesics comparable to that of morphine with less accompanying respiratory depression is naturally extended to obstetrics. In this field each study of one of the new analgesias is expected to show a diminished respiratory depression in the newborn. This field is extensive. Slide II shows at a glance the close relationship between the compounds.

Slide II

Demerol—I—methyl 4 phenyl piperidine, 4 carboxylic acid ester hydrochloride

Nisentil—3—dimethyl 4 phenyl 4 propionioxy piperidine hydrochloride



DEMOROL

The addition of the hydroxyl radicle and the removal of an atom of oxygen changes Demerol to a ketone known as compound No. 10720 studied principally by Lund.⁶

Slide III well shows the extent of this new synthetic chemical field. Some chemical and pharmacological comparisons are shown.

Slide III

The meperidines are chemically different but possess properties of morphine. They are somewhat related to atropine and possess some atropine like properties.

The pharmacological action of the meperidines varies between morphine and methyl morphine (codeine). It is an antispasmodic like the opium alkaloid papaverine (non-habit). Morphine constipates while atropine dilates the pupil. Here the meperidines differ.

Dolantin D140	Amidone
Demerol	Isoamidone
Dolophine 10820	Hochst 10582
Methadone	29048
Pethidine	10720

Nu 1196 (Nisentil)

Some may be different only in name while others present true differences. Apparently many precise

technicalities are confusing the picture between major and minor differences.

METHODS OF MEASUREMENTS
OF DRUG EFFECTS
ON THE NEWBORN

While this chemical investigation is endeavoring to eliminate respiratory depressing action from the drugs used for the relief of pain—methods of measurement for making comparison between the drugs as they effect the newborn has not advanced proportionately.

In the medical literature, the use of such terms as "no untoward results," "delivered successfully," "low incidence of foetal asphyxia," "transient apnea," and "slight cerebral anoxia" do not permit a comparison of the drug combinations or to the extent of their use in labor with their high percentages of complete amnesia-analgesia.

The engineers would use a Vernier caliper for fine measurement. Various degrees of foetal morbidity and asphyxia are more difficult to measure.

Has the advances in the measurement of the effects of drugs over the old classical description (Slide IV) been proportional to the advances made in effecting complete amnesia-analgesia?

Slide IV

NEWBORN INFANT

- Group I —Pink and breathing
- Group II —Asphyxia-livida (rigid and cyanotic)
- Group III —Asphyxia-pallida (pale and limp)
- Group IV —Stillborn

Individuals^{4, 5 & 6} and institutions have devised gradations to determine and compare the effects of drugs on the newborn because of the lack of a uniform standardized classification.

A standardized index or score worked out nationally might help in comparing the various drugs used in labor. Points for every fifteen seconds until spontaneous breathing occurs. Extra points for the degrees of cyanosis, seconds of resuscitation and a scale or curve of allowance for prematures on up to full term babies worked into the same index. Also included into this standardized scale or index a system of points to be added by the pediatrician for the degrees of listlessness, nonnursing babies based on its behavior the first five days of life.

An attempt—in addition to clocking the respiration, was made to clock in seconds, the first cry. Although the first respiration be zero seconds, the crying time is alterable if the baby is held by the feet to drain and aspirate the mucous. Breach and asphyxiated babies should not be held by the feet. Gentleness should be performed at all times. In many instances, the infant cries after it is placed in the prone position and ceases to cry when grasped by the feet again. Others cry regardless of whether they are prone or suspended by the feet. Likewise, the cough reflex is postponed which so often precedes the first cry. Although it is not constant, the crying time is influenced by the position of the baby. This phenomenon occurs even though the mother has had no medication. I have never seen this observation recorded in the literature.

Premature births and injury at birth have decreased 22% to 23% (surgical era) respectively while asphyxia and atelectasis have increased (drug era) 8% in the past ten years in the United States.⁷ This is gross and not precision measurement.

TIMING AND SELECTION OF DRUGS FOR AMNESIA-ANALGESIA

Does the term "complete-amnesia-analgesia" imply that the mother received a minimal dose or a dose in excess of minimum? Overindulgence may counteract prudence in the selection and timing of drugs.

In 1918, Dr. Barton Cooke Hirst⁸ in his Textbook of Obstetrics wrote:

Slide V

"Occasionally labor is little more than an inconvenience or a discomfort, and by no means an agony. Women have been known to expel a fullterm child when they were hardly conscious that labor had begun. Some show the fortitude of Isabella, wife of Charles V. To resort, therefore, to an anesthetic when there is no suffering or no complaint is unnecessary. Granting, however, that in many cases anesthesia in labor is an advantage, if not a necessity, the physician must select the anesthetic, and must determine when and how he shall use it."

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The patient has complete confidence in the judgement, knowledge, experience and skill of the obstetrician. This means his knowledge of the limits of the drug, its effect on the mother and baby, its effect on the mechanism of labor as well as the quantity of pain relief.

Every obstetrician has heard these words "I am glad you let me see my baby born" and every obstetrician has heard the nurse say "She behaves differently when you are around." I often wonder if the Grantly Dick Read method were extended, so to speak, from a public health standpoint to the neighbors' "gibbling tongues," if the drugs used could not be more appropriately applied to the relief of pain instead of fear. Is the physician expected to keep the patient anesthetized for several weeks in advance of labor so that she will not experience the first contraction which denotes labor's onset? Drugs administered too early in labor may have a deleterious effect on its mechanism.

Morphine administered to stop a threatened premature labor, followed by "Demerol" when labor advances and followed further by intravenous "Nembutal" in the second stage of labor is tragic. All these drugs are respiratory depressants and much resuscitation of the premature newborn is guaranteed. The safety of the mother and baby come first, the relief of pain last and this order cannot be reversed.

This see-saw problem is old. Usually the higher the percentage of satisfactory amnesia for the mother on the one hand is accompanied by a lower percentage of

immediate breathing in the newborn. Irving's⁹ conclusions are shown in chart form. (Slide VI)

Slide VI
FROM IRVING'S COMPARISON

	Percentage Satisfactory Amnesia	Percentage Babies Breathed Immediately
Barbiturate plus Scopolamine	85%	62%
Demerol plus Scopolamine	70%	82%

He also observed a higher percentage of respiratory complications when the barbiturates were used. It should be more than appropriately mentioned here that the prevention of the aspiration of vomitus will lower the incidence of pulmonary complications following childbirth. Depression¹⁰ of the ciliary and cough reflexes, and vocal cord control are reflexes of the respiratory tract that are invoked when pain relieving drugs are used.

The rationale of administering to a rapid multiparous birth—"Nembutal" intravenously and scopolamine in the muscle appears to have the mode of application of the two drugs reversed, if respiratory depression of the newborn is considered.

The use of "Sodium Pentothal" is limited in obstetrical surgery for it passes through the placenta in ten to twelve minutes becoming equally concentrated in the maternal and foetal bloods.¹¹

Does not the intravenous administration of either "Nembutal" or "Demerol" in the second stage of labor produce newborns requiring resuscitation up to 7% more or less?

A well performed episiotomy under local infiltration or block is one of the safest of the anesthetics to bring to a close the second stage of labor.

STUDY OF SCOPOLAMINE AND ITS ANTIDOTE (APOMORPHINE)

Some years ago while using as a routine, a combination of Demerol and scopolamine, a plan was evolved upon, whereby the Demerol was used solely in the first stage of labor while the scopolamine was reserved for the second stage of labor.¹² This plan prevented the "excitement" caused by the repetition of the scopolamine.

Rapid multiparous births entered the scheme. It was soon noted that in these cases of rapid births that the babies compared favorably equal at births between those born too rapidly without scopolamine and those whose mothers had received scopolamine.

Scopolamine was substituted for atropine prior to cesarean section without any apparent effect on the baby.

Premature births were administered scopolamine, whereas, heretofore, a strict routine for years of no amnesia-analgesia-anesthesia had been followed for these cases.

A trial study of these various uses of scopolamine together with its repetitious use in the full term birth in conjunction with small or subemetic doses of apomorphine for the control of restlessness is herewith presented.

SYMPTOMS—PHARMACOLOGY

SCOPOLAMINE: — Today scopolamine is gradually more widely used. Some fears or doubts still persist in the minds of many medical men, regarding its safety. At the Freiberg Clinic, Professors Kroenig and Gauss used alternate injections of morphine and scopolamine with the enticing name of "Twilight Sleep." This became popular about 1915. This new treatment was demanded by expectant mothers from all over the country. This drug combination (morphine—scopolamine) left a stigma which prevails today. This is the narcosis of the newborn (2% mortality?), the history of which we are all familiar. Abundant proof^{13 & 14} exists today, that the morphine in the combination is the cause of the asphyxia.

Today, scopolamine is usually employed in the combination either with morphine, the barbiturates or the meperidines (Demerol).²⁶

Scopolamine has been objected to because it is supposed to be dangerous, lengthens labor, increases post partum hemorrhage and causes foetal asphyxia and cerebral injury. The obstetrician should familiarize himself with any one drug used, that is—its reaction, limitations and antidote before attempting its use in combination with other drugs.

On the other hand, scopolamine is a most constant and reliable amnesia producing agent.^{4,15,16,19,23,24}

Dreisback and Snyder¹⁷ using cats (more susceptible than rabbits, rats or guinea pigs) injected large doses of scopolamine into the maternal animal and noted persistence of foetal activity. There was still no depression of foetal activity even though large doses were injected into the umbilical vein.

Cushny¹⁸ speaks of a small cat surviving after the administration of 7½ grs. which is equal to 750 1/100 gr. scopolamine.

Kirschbaum¹⁶ gave 26 1/100 gr. to one case. Barnett¹⁹ gave it thirty minutes before birth hypodermically.

Scopolamine (hyoscine) is closely allied to atropine chemically and pharmacologically. Unlike atropine it produces fatigue or drowsiness. Besides this tranquility, the memory is lost or becomes hazy. The skin becomes flushed, especially the face, circumoral palor and slight unconstant increase in pulse, temperature and respiration. Bronchospasm, if present, is relieved. The more annoying symptoms are dryness of the throat, dilatation of the pupils and in some cases uncontrollable excitement characterized by difficult incoherent and indistinct speech and uncertain move-

ments becoming excessive under stimulation known as reflex irritability. Occasionally oedema occurs at the fourchette, uvula, epiglottis and one or both eyelids or lips.

ANTIDOTE: Apomorphine hydrobromide is white and crystalline and is obtained by treating morphine with a strong mineral acid. Formerly it was classed as an emetic, dangerous, obsolete, unstable and toxic. On exposure to air or light—it becomes blue in color possibly adding some might to this belief. The United States Pharmacopoeia²⁰ recommends that it be discarded if a blue color develops.

Experimentally, Correll and Gray²¹ injected dogs with blue-black solutions four and one half months old and twelve months old daily (alternate days with fresh solution) and concluded that the dosage was the same for the fresh or the old blue-black solution. The blue-black solution caused no new toxic symptoms. Modern clinical experience indicates that the tablet form is readily absorbed, its action is not uncertain and the administration of doses below the emetic dose is free from respiratory and circulatory collapse.

Anesthetists^{4, 22} have employed with success the depressant properties of this drug for states of central nervous system irritability such as is seen in atropine poisoning.

In one of my cases, a private duty nurse, through error, administered 6.5 mgs. one and one half hours before delivery. Vomiting was slight. The baby was born pink and cried instantly. The pediatrician had not the slightest trouble other than the feeding problem complicated by a hair lip and cleft palate. Vomiting would have been more severe most likely, had not the patient been irrational from the antagonist of apomorphine, namely scopolamine.

SCOPOLAMINE AND APOMORPHINE: Dr. H. H. Johnson¹⁵ in 1925 was the first to employ scopolamine and apomorphine in labor. He read his paper at Hampton, Iowa. On inviting the Society to a discussion of his paper, he emphasized that his method was not the Freiberg method. He requested at that meeting that they refrain from using the method on abnormal cases of labor because he wanted none of the accidents of labor to be unjustly blamed on the scopolamine. He noted that less chloroform was necessary when scopolamine and apomorphine had been used.

DOSAGE

ONSET AND DURATION OF ACTION

SCOPOLAMINE: Ampoules of scopolamine hydrobromide were used. The ampoules were used routinely for two reasons. First, for uniform standardization of dosage and second, to avoid confusion between ampoules and tablets according to mode of administration (ampoules only for intravenous use).

It requires approximately thirty-five minutes for the full effect of scopolamine to manifest itself when given intramuscularly. At first it appears as though its full

effect is reached in twenty minutes. This first effect deepens slowly on up to thirty-five minutes. Intravenously, full maximum effect is reached in eight minutes. It also appears that its action is much deeper when given intravenously. Duration of action is approximately two hours more or less. "Reflex excitability under stimulation" can be detected as that of scopolamine four to five hours later on repetition of a small dose. Excitability rarely occurs after the initial dose. It was administered rapidly intravenously at any time interval before birth. No skin sensitivity tests were made.

APOMORPHINE: Tablets of apomorphine hydrobromide grs. 1/10 are kept on hand. Using the dilution of Hershenson and Brubaker,⁴ each tablet was dissolved in 5 c.c. saline (5 c.c. syringe). Blue discoloration was ignored up to twelve hours. Fresh solutions were made every twelve hours. One cubic centimeter of solution is equal to 1/50 gr. and one half cubic centimeter is equal to 1/100 gr. They were used according to judgement, of the severity of the excitability at hand produced by the scopolamine. If in doubt, the smaller dose could be repeated every fifteen minutes if need be. Although it requires approximately twenty-five minutes for fuller action which comes on most gradually (difficult to be precise). All administration of apomorphine was intramuscularly. Its intravenous (slow) administration was withheld for emergency purposes only.

TECHNIQUE OF ADMINISTRATION

RAPID BIRTHS: Scopolamine hydrobromide grs. 1/100 was given intravenously. Open ether²⁷ was administered (ventilation under the mask), if the time element involved was less than the eight minutes required for the full action of the scopolamine.

It is routine in all cases to administer straight oxygen for the last few pains, regardless of whether ether is administered or whether medicants had been used or not. The birth of the baby is concluded with local infiltration and episiotomy. The mother received oxygen meanwhile until all pulsation in the cord ceases and it is ligated.

If the time element involved was greater than eight minutes, then the ether was used to augment (if necessary) the scopolamine except for the last few pains.

If the case at hand proves to be a false "quickie," the case is adjusted on into the regular scopolamine-apomorphine routine (outlined below).

PREMATURE BIRTHS: For years it has been the routine in these cases to rigidly abstain from the use of drugs or anesthetics except where complications commanded it otherwise. Scopolamine was administered intramuscularly. Usually 1/100 gr. was used. Occasionally this was given in broken doses depending on the length of labor. If labor be prolonged, more scopolamine was required. However, care was taken to avoid restlessness which in turn may have required apomorphine. Ether was not used.

Straight oxygen was administered throughout the terminal stages of the second stage of labor as outlined under rapid births.

REGULAR BIRTHS (FULL TERM ROUTINE):

Slide VII

PROCEDURE

1—After admission cnema

Seconal grs. iss

2—Begins to mind pain

Scopolamine grs. 1/100 IM or IV

Apomorphine grs. 1/100 IM

3—Every hour

Scopolamine grs. 1/300 IM or IV

Apomorphine grs. 1/100 IM

If labor had advanced on admission, the "Seconal" grs. iss was omitted. Occasionally if labor was slow in advancing, it was repeated. The procedure seemed more steadied in those cases who had received "Seconal" grs. iii than those who had received none.

If labor advanced quickly the second dose of scopolamine was increased to grs. 1/150 but usually a shift of 1/300 gr. for one hour eliminated much restlessness. The initial dose serves as a guide. If nausea occurred without too much amnesia, the apomorphine could be eliminated at the next succeeding dose or the scopolamine could be increased. If the restlessness occurred the next dose could be postponed whereby the apomorphine could be increased to grs. 1/50 at the next succeeding dose. If restlessness was severe an extra dose of apomorphine could be administered.

MATERIAL

A total of nine hundred and ninety-five consecutive cases were used. Some selection was inevitable. Apomorphine was not administered for premature births. The routine was not adhered to for obvious reasons in cases of Grave's disease, eclampsia, nephritis, acute decompensation and even in compensated mitral lesions and diabetes. Great care was exercised to avoid any excitability in these cases. Although scopolamine was administered to some in this group, great care was taken to see that the dose remained below any stage of excitement.

Fourteen cases were eliminated whose babies died in utero (during pregnancy), refused medication or where the birth occurred too soon.

Forty-two cesarean sections are discussed separately who received scopolamine preoperatively. Sixteen pre-matures are included and also taken up separately. Forty-six cases of rapid multiparous births who received scopolamine rapidly at the end of the second stage of labor are separately shown. There were five cases of twins—making nine hundred and thirty-nine mothers and nine hundred and forty-four babies.

UNTOWARD EFFECT

No maternal deaths or near deaths occurred. In fact, no harm whatsoever was produced by scopolamine as

great care was used in avoiding excitability in cases of rapid pulse, respiration or hypertension.

Flushing of the face with or without circumoral pallor is the most constant effect of the drug noted. Dryness of the mouth is quite a constant complaint. Inability to read the following day is complained of frequently. No constant change in blood pressure, pulse or respiration was noted. Occasionally an increase in temperature was noted. More rarely swelling of the fourchette and eyelid occurred. Without any apparent respiratory rate disturbance or change in voice, one patient kept requesting that someone breathe for her. Her uvula was swollen and elongated (to the tongue). Personal regrets are entertained ever since that a complete check-up of the vocal cords and epiglottis was not made in this case.

EFFECT ON LABOR AND DELIVERY

The most striking observation noted is the slowing of the second stage of labor in the group of rapid multiparous births. Possibly the relief from the commotion and noise, to an atmosphere of quiet when scopolamine in these cases is injected intravenously does influence the observation. However, the mother's own expulsive efforts appears to be diminished.

The first stage of labor for the group as a whole progressed satisfactorily. Too many variables such as the size and position of the baby, the size of the pelvis, effectiveness of uterine contractions and the time of onset of labor are present to make any accurate observation of scopolamine on the duration of labor. Slide VIII shows the type of delivery and the percentage comparisons with the spontaneous births. No cesarean sections were invoked by the use of scopolamine. The incidence of low forceps in primiparas is a variable influenced by judgement more than by scopolamine.

Scopolamine presented no noticeable change in the behavior of the third stage of labor. One patient requiring the manual removal of the placenta had the same difficulty at her previous births. One inverted uterus occurred spontaneously.

BLOOD LOSS

There is no noticeable estimated change in the blood loss because scopolamine has been administered. A measured comparison was not done. All hemorrhages are accounted for as to cause. In the group of low cervical cesarean sections receiving scopolamine as a preoperative hypodermic — no postoperative hem-

orrhages occurred. Some were performed for placenta praevias. No case was packed. No pituitrin was used.

ANALGESIA-AMNESIA

RAPID BIRTHS: The one dose of scopolamine hydrobromide grs. 1/100 seems to produce quite a bit of sedation. Possibly the rapidity in which the two extremes are brought together makes the sedation appear greater. Usually the confusion or excitement over the rapidity of the birth aided in the production of satisfactory amnesia in this group.

Scopolamine given rapidly intravenously displaces to a very large degree the amount of ether used to effect a complete amnesia.

PREMATURE BIRTHS: This group registers some satisfaction—especially when compared to the routine of abstinence of drugs and anesthetics previously employed.

REGULAR BIRTHS (FULL TERM ROUTINE): Approximately forty percent had complete amnesia. Five percent complained and the remaining group of fifty-five percent were satisfactory. This latter group slept well between the pains and would snore in many instances a few pains prior to delivery. In most instances their recollections of incidences were eluded or in error. Some were quite clear. Some would argue that they hadn't had a thing in a clear convincing manner and after delivery could not recall the argument. Near the end of the series, they were advised in advance that they would recall incidences and this improved the situation. Some of the complete amnesia cases complained of the pains on hospital admission prior to the institution of the scopolamine.

Whether the apomorphine is supposed to be synergistic or antagonistic, the administration of grs. 1/100 does decrease the state of excitability caused by the scopolamine. In severer instances grs. 1/50 was used with the same result. Nausea was not troublesome. The length of action of the scopolamine seemed shortened after the use of apomorphine for the excitability.

At the beginning of the series the balance between the two drugs was troublesome. Experience and practice helped. There was a flimsy effect together with some complaints from the patient until the second or third dose is administered in the beginning of the first stage of labor.

EFFECT ON THE BABY

RAPID MULTIPAROUS BIRTHS: The majority of the babies in this group breathed instantly. Although breathing occurred instantly, some did not complete

Slide VIII
TYPE OF DELIVERY

	Cases	Spontaneous includes epis. with local infiltration	Forceps			Breech	Ver- sion	Manual Rota- tion	Caesar- ean	Manual Removal Placenta	Mortal- ity
			Low	Med.	High						
Primipara	939	809	35	5	0	17	7	21	0	4	0
Multipara			8	1	1	15	3	12	0	1	0
Total %		86.1	4.6	0.6	0.1	3.5	1.1	3.5	0.0	0.5	0.0

the cough and crying reflexes until after fifteen seconds. Usually this was completed in three to four seconds. One baby did not actually cry until the next day (the nature of the baby). There are no stillborn babies nor any requiring difficult resuscitation. All were pink. Slide IX shows the percentages for each group. Most of this group had had ether supplementing the scopolamine.

Slide IX
RAPID MULTIPAROUS BIRTHS

	Infant Breathing	No.	%
Group I	0 to 30 Seconds	37	89.2
	30 to 60 Seconds		
Group II	Over 1 Minute	4	
Group III	Mild Resuscitation	5	10.8
Group IV	Difficult Resuscitation		
Group V	Stillborn	0	0.0
	Totals	46	100.00

PREMATURE BIRTHS: Every baby in this group was pink and breathed instantly. The duration of pregnancy is shown in weeks in Slide X. Near term cases are not included. Psychological management of premature labor in the past has played the role of the sedative where the assurance of a happy ending became a reality.

Slide X
PREMATURE GROUP

Duration of Pregnancy in Weeks

No. weeks	No. cases	No. weeks	No. cases
26	0	35	0
27	1	36	4
28	0	37	1
29	0	38	--
30	2	39	--
31	4	40	Term
32	1	41	--
33	2	42	--
34	1	43	--

REGULAR BIRTHS (FULL TERM ROUTINE): It does not appear that the addition of small doses of apomorphine administered in the presence of scopolamine has any ill effect on the newborn.

Slide XI shows the percentage in the various groups. Group I minimizes the situation, for all but a few breathed and were pink at birth or within three to four seconds.

The seven still borns had other various causes of death. One had a mass in the upper abdomen and another was large and jaundiced (not RH). Three were due to prolapsed cords. One complete breech had a cord between the legs. One baby's chest, axilla, shoulders, etc. were wrapped with the cord.

Slide XI
SCOPOLAMINE—APOMORPRINE

	Breathing Time	No.	%
Group I	0 to 60 seconds	767	85.4
Group II	Over 1 minute	116	12.9
Group III	Mild Resuscitation		
Group IV	Difficult Resuscitation		
Group V	Stillborn	8	0.9
		7	0.8
	Totals	898	100.0

In this group there were deformities born alive—congenital heart, (two) hydrocephalus and spina bifida, viscera in thorax, intestines in cord, rib-clavicle-spinal-jaw deformity and oesophagocoele fistula.

CESAREAN SECTIONS

Forty-two low cervical cesarean sections with known live babies before operation as shown by indication in Slide XII received scopolamine as the preoperative medication.

It is to be emphasized again that pituitrin was not used before or after the delivery of the placenta, throughout the cesarean group as well as the entire series. Pituitrin "shock" can occur spontaneously, the same as under an anesthetic. Pituitrin also causes coronary constriction.²⁵ No such reaction occurred. Therefore, so far, the scopolamine is free of producing any such "shock-like" reactions.

Cyclopropane gas was used until after the operation proceeded to the point of delivery whereupon oxygen was used delaying the operation if necessary until the patient was "light." Cords were not ligated until after the delivery of the placenta. The anesthetic was continued for the closure.

Slide XII
LOW CERVICAL CESAREANS

Indications	No. Cases	Mortality		Post Partum		
		Fetal	Mat.	Hem.	Infec.	Phleb.
Fistulo in ano (5 repairs)	1	0	0	0	0	0
Placenta Praevia	3	0	0	0	0	0
Abruptio Placenta	1	1	0	0	0	0
Dystocia	6	0	0	0	0	0
Mild dystocia plus position						
Transverse	2	0	0	0	0	0
Breech	3	0	0	0	0	0
Previous Sections	26	0	0	0	0	2

There was some tracheal catheterization with aspiration in the group. One baby was born and reacted normally and died suddenly five hours after the delivery with bilateral atelectasis and in the one still-born, the foetal heart sounds were questionable before operation and it was accounted for as nature's accident.

Although not shown, the elderly primipara and sterility enters the picture of the disproportion. In three of the groups of previous sections, the uterine scar was found opened with the membranes protruding.⁹ The openings varied between one to three centimeters. One of these cases had colicky pain in the lower abdomen from Wednesday to Saturday. The other two had no complaints. Patients with previous sections who were already in labor were permitted to continue unless the original section was performed for an undersize pelvis, except here again, if the present labor be premature. Even with early ambulation, the two cases of phlebitis occurred.

SUMMARY AND CONCLUSIONS

1—Relaxation in labor is paramount to the practice of good obstetrics. Is there not being born today, a new movement or "era" to pare down the excessive and unnecessary use of the drugs which this "drug era" has brought along with it?

2—Had a universal or standardized classification for neonatal apnoea (asphyxia-narcosis) been evolved in accordance with the pace set by the use of drugs to produce amnesia-analgesia, would not more prudence be exercised in the selection and timing of drugs? Little more than the breathing time in seconds has been added to the older classification. Without any sufficient explanation it has been observed that the upending of a baby for the drainage of mucous and fluid in many instances postpones the crying time as well as the cough reflex which sometimes precedes it.

3—The use of scopolamine-apomorphine for full term deliveries as a routine procedure is not recommended. It should not be used to displace or disturb any other accustomed routine. It is not too satisfactory for the first stage of labor. Here it seems flimsy without the preliminary aid of some underlying base such as "Seconal." Its use, however, does not invoke operative interference, greatly disturb the mechanism of labor or produce ill effects on the newborn.

4—The use of subemetic doses of apomorphine may be used with safety to control the "wild restlessness" produced by the repetition of the scopolamine. This

may enhance the use of scopolamine in other drug routines where the fear of this "wild state" handicaps its repetitious use. It is wiser to use this small dose of apomorphine for such a condition than to use an anesthetic and to apply forceps—thus bringing labor to a too previous an end.

5—Scopolamine may be injected intravenously (ampoules) rapidly with safety at any time in the second stage of labor.

6—Scopolamine administered intravenously is an excellent agent for rapid births. It should be used initially and should also receive priority to the employment of an anesthetic. The anesthetic should be supplemental and then used only if necessary, accordingly. Quite a bit of amnesia is produced in most cases with the administration of 1/100 gr. scopolamine intravenously.

7—Scopolamine retards the second stage of labor to some degree. Possibly through the loss of voluntary expulsive and directive efforts produced by the sedation.

8—Scopolamine displaces the quantity of anesthetic necessary to bring to a close the second stage of labor.

9—Scopolamine may be used as a preoperative medicant. If its use otherwise displaces an anesthetic it may be used here to steady the anesthetic especially in cesarean sections up to the point of delivery of the baby.

10—Scopolamine may be used with safety for premature births. Its use is an improvement over the "technique of abstinence" previously employed for these cases.

11—To combine some hind-sight and fore-thought into a warning regarding the coming popular "Demerol-scopolamine" combination, attention is called to the atropine like properties of Demerol and the kinship of scopolamine to atropine. A heavy hand should not administer this combination. An enema and 25 mgs. of Demerol were given prior to this series to a primipara and slight cyanosis occurred. Some hours later 25 mgs. were repeated and the cyanosis re-occurred. Demerol 200 mgs. I.V. and approximately 1/400 gr. scopolamine caused cyanosis and cessation of respiration in Philadelphia. Also, a case of intubation of the trachea because of marked oedema of the epiglottis is recalled. Which shall we blame? The Demerol? The scopolamine?

12—If scopolamine, although an older agent, were more frequently and extensively used in the "Practice of Obstetrics," it should tend to displace and decrease to some degree the more respiratory depressing drugs now used with their more deleterious effect on the newborn, especially in the second stage of labor. No known method today is completely satisfactory. From the old "Twilight sleep" to the new "Twilight sleep,"—from painless childbirth to the relief of pain in childbirth,—from the barbiturates to the meperidines, so goes the circle with scopolamine.

*The risk of rupture of the scar of an old cesarean is greater in later pregnancy or very, very early labor than when labor is fully established. Three reasons bear this out. 1—All cases of ruptured uteri with previous scars ever attended occurred at this stage and never when labor was established. 2—From reports in the literature, if all repeat sections were scheduled two weeks prior to the expected date of delivery, there still would be ruptured uteri. 3—These three cases of incomplete ruptured uteri found at section before they had completed the rupture with the advance of pregnancy bears this out. Only one had colicky pains which at first were mistaken for labor by the patient herself.

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Drug Therapy in Allergic Disease*

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The abnormal response in allergic disease is based on the premise that the cells of the sensitized organism upon contact with antigen produce an explosive reaction with liberation of Histamine or H-like substances, this action resulting in inflammation.

What are the changes observed in allergic disease? The tissue changes in allergy are:

1) Increased capillary permeability with fluid and cellular infiltration, particularly the eosinophils and hyperemia. This results in edema of the entire respiratory wall, a significant feature to be kept in mind in the treatment of asthma.

2) Hypersecretion of a thick, viscid mucus with resultant bronchial and bronchiolar obstruction.

3) Smooth muscle spasm. Much less importance is being attached to smooth muscle spasm as a significant factor in the patho-physiology of asthma. However, there is much experimental and clinical evidence to support the contention that smooth muscle spasm has a distinct part in the allergic response.

There are several secondary changes in tissues that result from the interaction of the three important tissue changes as enumerated. In chronic respiratory allergic disease, particularly if infectious agents are a factor, chronic inflammation of the walls of the bronchi, bronchioles and alveoli, thickening, fibrosis, rupture, over-distention of the alveoli, possibly hypertrophy of smooth muscle, transition of epithelial cells and thickening of basement membrane are frequently en-

countered. These features are enumerated in order to focus your attention on the patho-physiological changes when discussing therapy of bronchial asthma.

What is the approach to the treatment of allergic disease, particularly to bronchial asthma?

The treatment is divided into 4 parts and only that dealing with symptomatic drug therapy will be considered here. In brief these 4 parts are:

1) To remove, to eliminate, to avoid, to protect the patient from the allergen or allergens.

2) Where it is impossible to effect the measures outlined in (1), to attempt an orderly program of hyposensitization.

3) Non-specific measures, as climatotherapy, removal of anatomical obstruction such as septal defects of the nose, attention to hygienic measures, typhoid vaccine therapy, etc.

4) Symptomatic drug therapy and supportive measures (hormones).

In many instances the principles as listed under the first three headings cannot be totally effected or, if so, symptoms of the disease continue. What drug therapy can be used to keep the patient comfortable?

The major part of this discussion will be devoted to the use of drugs in the treatment of bronchial asthma. The altered physiologic responses in bronchial asthma result in: 1) edema of the wall of the entire respiratory tract; 2) the accumulation of thick, tenacious secretions in the bronchi and bronchioles with partial or complete obstruction; (3) smooth muscle spasm. The

* (Delivered at Annual Session, May 17, 1951, Myrtle Beach).

extent of pathological changes depends on the nature and amount of the stimulus, the individual susceptibility, and the length of time of involvement. We shall consider asthma from the very mildest form as associated with pollen hay fever to the severe chronic forms in which irreversible structural changes have taken place as emphysema, atelectasis, chronic infection.

Drugs helpful in reducing bronchiolar spasm, edema, and removing secretions:

Epinephrin (adrenalin) is the most potent bronchodilating drug available for clinical use and the most important medication for the relief of the acute attack of bronchial asthma. In addition to the bronchodilating effect, epinephrin produces shrinkage of the edema of the bronchial mucous membrane through a vasoconstrictor effect.

Epinephrin 1:1000, aqueous solution, administered in small doses of 0.2 to 0.5 cc. subcutaneously, is the method of choice. The smallest dose to prove effective in the relief of the attack should be used. The principle of small dosage reduces the possibility of unpleasant side effects, as tachycardia, tremor, sweating, headache, intestinal symptoms, etc. The patient who needs adrenalin should be taught the use of syringe and needle for self administration. This gives the patient a sense of security that he has a medication readily available that will relieve him of his attacks. The rather rare instance of abuse or over-dosage of adrenalin by the patient is offset by the advantages of having a drug which is effective for the majority of attacks of asthma.

In patients who have cardiac disease, as coronary sclerosis or hypertension, a more cautious approach to the use of epinephrin should be practiced. The dosage should be reduced to the smallest amount which will give relief of the asthmatic attack. The presence of any cardiac or hypertensive state unless of an extreme degree is not a contraindication to the careful administration of adrenalin. Accidents have been observed only rarely.

Epinephrin in oil or gelatin in larger doses (2 mg) given intramuscularly is a slow acting epinephrin which will give prolonged relief. Despite precautions, the entire amount of adrenalin which is 2 mg, or 4 times the amount of a maximum dose of the aqueous extract, is occasionally rapidly absorbed with unpleasant side effects. This feature reduces its value considerably. Another disadvantage is the occasional sensitivity to the vegetable oil used in suspending the epinephrin with resultant unpleasant local or even systemic reaction. Aqueous epinephrin is more easily administered, and is without these disadvantages.

Epinephrin 1:100 by inhalation is effective in relieving mild attacks of asthma. The advantages are its ease of administration and rapidity of action. The disadvantages are the short period of relief and ineffectiveness in anything more than the mildest of asthmatic attacks. Epinephrin by inhalation often

produces pharyngeal and tracheal irritation resulting from the vasoconstricting action on the mucous membranes particularly in those patients who are prone to excessive usage. More recently Aleudrin or Isuprel has been made available and in some instances appears equally effective or even more effective than epinephrin by inhalation. Isuprel is used in the 1:2000 solution for subcutaneous injection, 1:200 solution for inhalation, and the 10 or 15 mg. sublingual tablet. Isuprel has a singular disadvantage in its likelihood of producing more cardiac stimulation than epinephrin.

Ephedrine—

Ephedrine has the same action in bronchial asthma as epinephrin, but its action is less pronounced and more slow. Ephedrine produces dilatation of the bronchioles, but has less vasoconstrictor action than epinephrin. Ephedrine has the disadvantage of producing more central nervous system stimulation with nervousness, insomnia, and frequently must be given with a sedative to offset this stimulating effect. Ephedrine is administered orally and has a prolonged action usually of 3-5 hours. It is not effective in either the acute paroxysm with a sudden onset because of its slowness of action or in the severe attack because of its lack of potency. In the mild to moderate degree of asthma ephedrine is of value in relief of, or the prevention of the attack when administered at regular intervals. The use of ephedrine in older men must be viewed with caution because of the tendency of ephedrine to produce spasm of the muscles of the neck of the bladder with resultant urinary distress and occasionally urinary retention. Symptoms of gastrointestinal intolerance are encountered occasionally, obviating the further use of ephedrine. The question of synthetic ephedrine-like preparation arises. In general, the action of these substances is distinctly less than that of ephedrine. When symptoms of intolerance to ephedrine are present, the synthetic substances can be tried and occasionally adequate relief will be obtained. The synthetic drugs are helpful, particularly in the aged, those with cardiac or vascular disease, those possessing a great degree of vasomotor instability, and occasionally in small children. The drugs of choice are methanine, neosynephrin and propadrine. The dosage is the same or slightly greater than that of ephedrine.

Theophylline with Ethylenediamine (Aminophyllin)

Aminophyllin is one of the most helpful drugs in the relief of the asthmatic attack. Aminophyllin acts directly on the smooth muscle to inhibit bronchospasm and also increases capillary circulation in the lung fields.

Aminophyllin is most effective when given intravenously in doses of 3¾ to 7½ grains. Aminophyllin given intravenously must be administered slowly requiring 5 to 10 minutes to administer 3¾ to 7½ grains. No untoward reactions are likely to occur if this precaution is followed. Aminophyllin may be given as often as every 4-6 hours, although this is

seldom necessary unless the patient is in status asthmaticus. Aminophyllin is too painful to be given intramuscularly and this route should be avoided. Aminophyllin in doses of 6 to 9 grains dissolved in 2 or 3 ounces of water instilled rectally or used in the form of a rectal suppository is effective.

Aminophyllin orally, alone or in conjunction with ephedrine, has less benefit. The oral dosage is usually too small to be effective. Some gastrointestinal intolerance is encountered occasionally, forbidding further use of the drug.

Aminophyllin is one of the three most valuable drugs in the control of the attack of asthma. The more severe and prolonged the attack, the greater the need to employ aminophyllin in addition to, or in place of epinephrin. Amniophyllin has apparently proven to be life-saving when administered in severe anaphylatic reactions or severe allergic reactions of accidental origin.

Drugs which facilitate expectoration of bronchial secretions:

A drug which aids in liquefying mucus and provides for expectoration of thick, tenacious bronchial secretions is of great value in the treatment of the patient with bronchial asthma. Potassium or sodium iodide is helpful in accomplishing this. Iodide is excreted into the bronchial secretions 20 minutes after oral administration. Since iodides are readily excreted into the bronchial secretions after administration by mouth, it is unnecessary to give iodides by the intravenous route. Iodides are best given over a period of time rather than erratic and intermittent administration. Sensitivity to iodides is occasionally experienced. This sensitivity is manifested by marked rhinorrhea, conjunctivitis, salivation, rawness of throat, and swelling of the salivary glands. Prompt relief of symptoms occurs in 24 to 48 hours after cessation of the drug. Acneform eruptions and metallic taste in the mouth are unpleasant side effects, but do not contraindicate the continued use of iodide. Iodides may be administered with other agents as Lobelia, Grindelia, but it is doubtful if these agents enhance the beneficial effects at all. The dosage of iodides may vary from 5 to 30 grains, 3 to 4 times daily.

In children, the act of vomiting often serves as a forceful means of expulsion of bronchial mucus, with relief of asthma. To induce vomiting, syrup of Ipecac, usually in teaspoonful doses or more, is effective. In small amounts syrup of Ipecac serves only to nauseate and will not prove to be helpful.

Ammonium Chloride has been used as an expectorant in bronchial asthma, but is less effective than iodides.

Sedation:

Bronchial asthma because it interferes with normal respiration is frequently attended with nervousness, anxiety and apprehension. Moreover the medication employed to relieve asthma is prone to produce some

stimulation and mental hyperactivity—this is particularly true of the Xanthine and ephedrine group of drugs. Therefore, sedation becomes a necessity in the management of a larger percentage of patients suffering with asthma. Sedation should be mild in order that respiration is not depressed. Medication that can be administered orally in small doses is preferable. Of the drugs used, the barbiturates are the most commonly employed. Phenobarbital— $\frac{1}{4}$ to $\frac{1}{2}$ grains 4 times daily is very effective. The incidence of sensitivity to the barbiturates is extremely low, but occasionally increase of symptom is noted after the administration of barbiturates. The asthmatic with nasal polypi should be observed carefully for drug allergy. This group of chronic asthmatics are particularly prone to exhibit sensitivity to drugs, particularly to aspirin and coal tar derivatives. Chloral hydrate in doses of 10 to 30 grains 2 or 3 times daily is recommended. The disadvantages of chloral are its extreme distaste, and headache, nausea are frequently noted following its use. Chloral is a valuable sedative in the treatment of asthma.

Morphine—Morphine-like preparations and Demerol:

There is disagreement concerning the use of morphine in the treatment of bronchial asthma. Morphine is dangerous in asthma of a chronic severe nature or status asthmaticus. Morphine tends to depress the respiratory rate, dull the respiratory center, diminish tidal volume, depress the cough reflex, and may increase bronchial and bronchiolar spasm. This may lead to further bronchial obstruction and asphyxia with death. The more severe the asthma, the greater the fear of using morphine.

In the patient who is not too ill and who has a severe cough, codeine or dilaudid in combination with iodides and ephedrine is helpful.

The action of demerol is similar to morphine, although a greater range of safety with its use is probable. Demerol is habit forming. The effectiveness of demerol in controlling the asthmatic paroxysm is not of sufficient degree to warrant the inclusion of demerol into the routine care of the asthmatic individual. Many agree that the same dangers exist with demerol as with morphine. Occasionally some relief will be obtained with the use of demerol. The same caution exists with the use of demerol as with morphine, that the more ill the patient, the greater care in administering demerol. The administration of demerol over a long period of time is discouraged.

Antibiotic Therapy in Asthma:

Bacterial or viral infection is not considered as a primary cause of asthma in the majority of cases although the increase in asthmatic symptoms with or resulting from respiratory infection is a common experience. The influence of respiratory infection in asthma is seen in children as well as adults and is acknowledged to be common in adults developing

asthma after the age of forty. In chronic asthma, there is frequently observed chronic inflammatory changes in the nasal sinus mucosa, and in the bronchial tubes, which changes are attributed in large part to acute or chronic recurring respiratory infections. These infections are more prone to occur in the Spring and Fall seasons when sharp changes in weather are present.

The following points are helpful in determining respiratory infection: 1) the presence of purulent material in the nasal passages or the ostia of the sinuses; 2) purulent exudate in the pharynx; 3) the nature and characteristics of the sputum, whether purulent or not; 4) the presence of low grade fever; 5) increase in sed. rate and leucocytosis, and, 6) the history suggesting a respiratory infection.

Whether respiratory infection is a primary or secondary cause, the physician should recognize its existence and treat accordingly. No claim is made that infectious asthma will be relieved by antibiotic therapy; however, almost all of the infections superimposed on an asthmatic state can be lessened or eliminated by proper antibiotic therapy.

The administration of antibiotics by aerosol therapy has certain disadvantages. These disadvantages are: 1) necessity of special apparatus for aerosols; 2) the meticulous care and time consumed in proper aerosol therapy; 3) the failure to attain in many instances adequate blood levels of antibiotic substances; 4) the failure to obtain cooperation from the patient, particularly the very young, the very ill and the elderly patients. Aerosol therapy as the method of administering antibiotics is not recommended as the method of choice.

The substances used are:

Sulfa drugs. This group of drugs are very effective, are administered orally, and are inexpensive. The use of penicillin and the new antibiotic substances have overshadowed the use of the sulfa drugs. The sulfa drugs are as a whole well tolerated, have a low incidence of sensitization, and effective blood levels can be obtained. They deserve a place in the therapy of bacterial infections of the respiratory tract in asthmatics. The sulfas can usually be given safely over a long period of time if the patient follows instructions and is observed.

Penicillin is used more commonly and with satisfactory results. The incidence of sensitization to penicillin is no greater in the allergic than non-allergic groups. 3,000,000 units divided into 5 daily doses is effective in relieving many acute or chronic episodes of respiratory infections. The use of antibiotic therapy must not preclude the use of other medication indicated for asthma, as the iodides, ephedrine, aminophyllin and epinephrin.

The new antibiotics — chloromycetin, aureomycin, terramycin—have a greater spectrum in combating respiratory infections. They have the advantage in

that they can be given orally. However, the cost of these drugs is great and is prohibitive if given over any length of time. They have a low incidence of sensitization.

The consideration of infection in asthma is based on the belief that any stimulus which increases the edema of the mucous membranes, which produces more mucus and adds to bronchiolar obstruction and enhances smooth muscle spasm should be eliminated or reduced as much as possible. Adequate antibiotic therapy is helpful in the asthmatic where respiratory infection is present.

Antihistamines:

The introduction of the antihistamine substances has made a singular contribution in providing the immunologist with further knowledge of the mechanism of allergic reactions. The clinical use of the antihistamine drugs has provided the physician with the means to control symptoms in certain well selected types of allergic disease.

As a result of antigen—antibody union there is a liberation of histamine or a chemical substance closely related to histamine which substance is responsible for the explosive reactions of allergic disease. Perhaps other substances, as acetylcholine, are associated with mediating the allergic reaction. To simplify the discussion, we assume that histamine or H-substance is liberated with antigen—antibody union.

Histamine produces:

- 1) Contraction of smooth muscle of the bronchi, the intestine and uterus.
- 2) Dilatation of capillaries with increased capillary permeability.
- 3) Diminution of cardiac output and fall in blood pressure.
- 4) Constriction of pulmonary artery with rise in pulmonary pressure.
- 5) Increased secretory activity of gastric glands and *salivary glands*.

Clinically there is vertigo, flushing and headache after histamine injection.

The antihistamine drugs have an affinity for the receptor cell and block the action of histamine or H-substance liberated by antigen—antibody union. This is the currently accepted theory of the action of the antihistamine substances. The antihistamines do not destroy histamine chemically, do not increase tolerance to histamine, do not prevent antigen—antibody union, and do not act as sympathomimetic drugs. The antihistamines have some action as parasympathetic blocking agents.

The antihistamine drugs prevent in animals:

- 1) Anaphylactoid shock induced by histamine.
 - 2) Anaphylactic shock both in vivo and in vitro.
- In Man
- 3) Antihistamine drugs inhibit wheal formation—
 - 4) have no effect on gastric secretion—
 - 5) inhibit the action of hyaluronidase—
 - 6) have a distinctly anaesthetic action locally—

7) have a sedative action in man but not in animals.

What allergic states are the antihistamine drugs helpful in? The clinical conditions and the results of the antihistamine drugs are:

- | | |
|----------------------------|--------------------------------------|
| 1) Allergic rhinitis: | |
| Seasonal | —good results |
| Non-seasonal | — |
| | hyperesthetic—good |
| | obstructive—poor |
| 2) Urticaria: | |
| Acute | —excellent results |
| Chronic | —fair results |
| 3) Angioedema | —poor results |
| 4) Serum sickness | —good results if the degree is mild. |
| 5) Atopic eczema | —poor results |
| 6) Contact allergic eczema | —poor results |
| 7) Bronchial asthma | —poor results |

In theory, the antihistamines should have a beneficial influence in asthma but the clinical results have been very disappointing. The antihistamine drugs have in many instances caused aggravation of asthmatic symptoms. This increase in symptoms is probably due to the drying effect on bronchial secretions, making it more difficult for the patient to expel the thick viscid mucus. Perhaps two other reasons for the failure in asthma of the antihistamine drugs can be suggested: 1) that the surface area involved in asthma is too great for adequate therapy; 2) that perhaps substances other than histamine, as acetylcholine, help to mediate the allergic mechanism in bronchial asthma.

If one sees clinical improvement in asthma with antihistamine drug therapy, one of three conditions is usually present:

- 1) That the asthma is of extremely mild degree needing little or no medication.
- 2) That the beneficial results are the result of the sedative action of antihistamine drugs.
- 3) That the patients are young children with an allergic cough (probably sedative effect).

These three experiences of beneficial results from the use of antihistamine drugs are encountered occasionally. In the chronic asthmatic of moderate or severe degree the antihistamine substances have little value except where they may be used for sedative effects. They can be combined with other drugs, as ephedrine, aminophyllin, iodides. Otherwise their use in chronic asthma is rarely indicated.

A C T H and Cortisone in Allergic Disease:

Any statements made in reference to the use of A C T H and Cortisone in allergic disease are preliminary and subject to change. The results of the use of A C T H and Cortisone in treating certain phases of allergic diseases are encouraging. The exact mechanism of the action of the hormones in allergic disease is unknown.

Under normal (optional) conditions, the pituitary-adrenal system is in a state of balance. The peripheral tissues have minimal adrenal cortical requirements, permitting the cortical hormone in the blood to hold the pituitary activity (A C T H) in check.

Under periods of stress the peripheral tissues require an increased amount of cortical hormone, removing this hormone from the circulating blood, thereby removing the check on pituitary activity (A C T H). A C T H production increases and this condition persists until stress is removed or adaptation takes place.

This is over-simplification of the course of events in the hormone regulation, but it affords some idea of the probable sequence of steps in the hormone supply of the pituitary adrenal axis.

The discussion of the hormones is limited to:

- 1) Indications for the use of A C T H and Cortisone
- 2) Dosage of each hormone
- 3) Few precautions to be followed with its use.

The indications for the use of A C T H and Cortisone in allergic disease are—the hormone substances are to be used only in the acutely or gravely ill patient with allergic disease where accepted measures of treatment have failed to produce a satisfactory clinical response, as is frequently encountered in status asthmaticus. The only exception is in a self limited disease (as serum sickness or drug reaction) where discomfort is great and the time element is important and the use of the hormones may be justified.

Which hormone should be employed—

In the gravely ill patient, where the adrenal cortical function is likely to be exhausted and will not respond to A C T H stimulation, Cortisone appears to be indicated. In patients requiring the drug over a long period of time, Cortisone is preferable. In overall results, A C T H appears to give the highest percentage of satisfactory clinical results. Cortisone has the advantage in that it can be administered orally. The cost of the hormone to the patient on a basis of 1 mg. of A C T H to 3 or 4 mg. of Cortisone is about the same. Cost of the hormone is not a determining factor in the choice of which is to be used, but the method of administration may be.

What dosage of the hormone is used—

The dosage parallels that given in rheumatoid arthritis—of A C T H 80 to 100 mg. divided into 4 doses each day for 2 days, then a graduated decrease over the next 8 days until a minimal maintenance dose is reached—this is approximately 20 mg. daily in most patients.

Cortisone, 300 mg. divided into 3 doses the first day, with a reduction to 200 mg. the next 2 days, then a rapid, but graduated, decrease in the next 5 days to a minimal maintenance dosage of 25-50 mg. daily.

The dosage given here is that recommended for the asthmatic patient in severe status asthmaticus. Other allergic diseases needing hormone therapy can be

treated with equal or less amounts.

Precautions to be observed:

1) A careful record of weight, blood pressure, and if prolonged use, measures to detect hyperglycemia. If water retention is a factor, then low sodium diet and, if necessary, ammonium chloride and mercurial diuretics are indicated.

2) The administration of potassium chloride, enteric coated tablets, 4 gms. daily, to offset muscle fatigue and gastrointestinal symptoms due to potassium deficiency.

3) Close observation for any change in the personality, as depression or extreme euphoria.

Despite the use of these hormones in status asthmaticus, several workers have reported deaths. The hormones cannot relieve bronchial and bronchiolar obstruction, which is the chief pathological picture in status asthmaticus. In satisfactory responses to hormone therapy the improvement is quite evident by the end of 72 hours, but a sense of well being may be noted in a few hours after the initial administration of the hormone.

In summary, the results with A C T H and Cortisone therapy are:

- 1) Status asthmaticus—(indicated)
 - often dramatic relief, but if chronic asthma, as most are, will relapse in short time, if hormone is withdrawn.
- 2) Conditions in which acute edema is the significant finding:
 - a) Serum sickness—including drug reactions, as Penicillin

- b) Acute urticaria
- c) Marked nasal polyposis
- d) Seasonal hay fever

Dramatic relief is experienced, but the indications for treatment are not clearly established.

3) Atopic eczema

Contact allergic eczema

No dramatic improvement noted, but some results are encouraging. However, relapses are constant if hormone is withdrawn, and the relapse is prone to be more extensive than original involvement.

4) Ocular allergic disorders

Satisfactory results, systemically with A C T H or Cortisone, or locally Cortisone when administered.

Often dramatic response.

In summary, the drugs which are helpful in the management of allergic disease have been outlined, namely, 1) the antispasmodic agents, epinephrin, ephedrine and aminophyllin; 2) the expectorants, of which the iodides are superior; 3) the sedatives, the barbiturates and chloral are the most helpful and a word of caution about the use of morphine and demerol; 4) the control of respiratory infections with the antibiotics and sulfa compounds; 5) the antihistamine drugs and the need for carefully selecting the allergic diseases in which they are most helpful; 6) the hormones, A C T H and Cortisone and their value in the extremely ill allergic patient.

Sympathectomy For Hypertension Follow-Up Survey

F. E. KREDEL, M.D., G. S. T. PEEPLES, M.D.
AND BYRON WHAM

The study included 15 cases with fairly complete follow-up data and 6 others with only fragmentary notes. Of the 15, there were 10 males (8 colored and 2 white) and 5 females (1 colored and 4 white). The ages ranged from 24 to 47 averaging 35. The presenting blood pressures ranged from 164/108 to 290/170 averaging about 220 systolic over 130 to 140 diastolic. The follow-up period ranged from 5 to 33 months averaging 21 months.

While the number of cases is not adequate for statistical analysis in all categories of the survey, certain facts are outstanding and of significance.

1. Capacity for work.

Ten of the 15 were completely rehabilitated and able to carry on a job. One other was improved to the extent of carrying out important work in her

home. One was improved little if any, having had operation on one side only. Two went on to die of their disease without being rehabilitated. Work capacity in 1 other was not recorded. In addition, 3 of the 6 cases with fragmentary data are known to be doing well with 2 of them holding down fulltime jobs.

2. Headache.

The symptom of headache was disabling in all cases preoperatively. This was abolished as a cause of major handicap in 13 of the 15. Seven had no headache, 3 very little, and 3 were definitely improved in this regard. The only 2 failures were one who went on to die later of cerebral hemorrhage and one who had operation on one side only.

3. Blood pressure.

There is no absolute correlation between changes in blood pressure and clinical result. There is some lowering of pressure in most cases but rarely to essentially normal levels. Many cases have maintained a good

(This paper is a summary of the results of 15 cases who received sympathectomy for hypertension through the services of the Vocational Rehabilitation Program of South Carolina. Mr. Byron Wham is the supervisor of the Program with Dr. Kredel as special consultant and Dr. Peebles as medical consultant. Ed.)

clinical result thus far; although pressures have returned almost to preoperative levels.

The high diastolic type is known to have a bad outlook and the 2 late fatalities had diastolic pressures of 150 or over. Yet 2 others in this category had good results. Since the natural course of hypertension is progressive, the fact that no tendency to progression in the 13 successful cases has occurred in this period represents an absolute gain.

4. Analysis of failures.

One case died suddenly of cerebral hemorrhage 5 months after completion of treatment without having been rehabilitated. The high diastolic level of 150 was the only really adverse sign in the preoperative evaluation of this case.

The other fatal case had other warning signals. The pressure was 290/170. The age of 44 approaches the upper limits of acceptability for sympathectomy. The renal function was markedly impaired with a P.S.P. excretion of 25% and a B.U.N. ranging up to 80. Furthermore, symptoms had been present for 19 years. This was clearly a case of desperation and operation was not successful in postponing the inevitable.

The man who remains essentially unimproved after operation on one side only had been disabled for a long time, had been in the State Hospital for the Insane, and was found to have persistent renal and cardiac insufficiency. His age is 47.

5. Miscellaneous Observations.

There is no indication of disabling after-effects from the operation. No case has continued to have severe postural hypotension at the time of check-up. In-

cisional pain is not recorded as a cause of disability, although this is known to be a matter of concern in some cases of thoracolumbar sympathectomy.

The magnitude of the sympathectomy is indicated in only a portion of the cases and has extended as high as T1 and as low as L3. This series produces no data of value concerning the relation of extensiveness of the operation and the clinical result.

Changes in the eye-grounds and cardiac status have not yielded information of any significance in this small series. On the other hand, severe impairment of kidney function, long duration of disease, and high diastolic blood pressure levels must be regarded as unfavorable factors.

CONCLUSION

Analysis of the follow-up data on 15 cases of sympathectomy for hypertension indicates that this form of physical restoration has been most worthwhile from the standpoint of vocational rehabilitation. Some failures will occur but their number may be minimized by eliminating those whose disease is too far advanced. Renewed capacity for work and elimination of disabling symptoms seem to be of more import than blood pressure levels in estimating improvement in these people.

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WILMS' TUMOR: A REPORT OF CASES

W. ELY BROOKS, M. D.

One of the most common and distressing of all neoplasms is the so-called embryonal adenomyosarcoma, or Wilms' tumor of the kidney. In contradistinction to other renal tumors, it is characterized by the facts that it is essentially a disease of infancy and childhood, usually occurring before the age of five; its course is silent and rapid, leading to a generally fatal outcome; and it has a unique histological picture. There are a multiplicity of theories which have been advanced regarding its pathogenesis.

It is generally considered that the most common malignant tumor of infants and children, with the possible exception of tumors of the eye, is the highly malignant Wilms' tumor. Although this is the most common type of renal tumor in children, it is of relatively infrequent occurrence. Bell,¹ in 1938, re-

ported only five cases in 30,000 autopsies in which children were proportionately represented. Due to the increasing number of articles which have appeared on this subject in recent years, one might gain the impression that the disease is on the increase. Whether or not this is true would be difficult to determine, but it is felt that the apparent increase is due to the fact that there is a greater awareness of the disease and that tissue diagnosis is being employed more frequently than in the past.

A series of ten cases of Wilms' tumor is a large series. Only a few authors, Ladd and White,² Rusch,³ Campbell⁴ and Priestley,⁵ have reported series in each of which there were more than 30 cases. In the past ten years there have been eight cases of Wilms' tumor treated at the Roper Hospital. These cases form the basis for this report.

Wilms' tumor usually occurs in the first five years of life, and has been observed in the fetus. It occurs equally in both sexes, equally on both sides, and rarely may be bilateral. A familial tendency has been noted by some observers, as many as three members

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of the same family having died of this malignancy.

Until 1870, these neoplasms were thought to represent carcinoma of the kidney, but at that time sarcomatous elements were noted in addition. In 1872, Eberth⁶ gave the first accurate description of a mixed tumor of the kidney, and in 1899 a three-volume monograph was published by Wilms. This was a monumental work on these comparatively rare and highly malignant renal tumors, and since that time Wilms' name has been practically synonymous with "embryonal adenomyosarcoma of the kidney."

Grossly, the tumor is a large, grayish-white mass which is usually encapsulated in a thick white membrane. This mass may be situated at any position, encroaching upon some part of the kidney and destroying a greater or lesser part of the parenchyma by pressure. It is difficult to strip the capsule of the kidney away from the capsule of the tumor. The tumor tends to remain confined to its capsule until relatively late in the course of the disease. Growth is by expansion, and when the tumor breaks through the capsule it rapidly sends out irregular projections into the surrounding tissues.

Histologically, the important finding is the association of epithelial with connective tissue elements. One may find in the same tumor epithelial cells, smooth and striated muscle cells, and even bone or cartilage. The predominating malignant cells are anaplastic round cells and fairly well differentiated epithelial cells. There may be a great variation not only in the cells, but in the degree of activity in various portions of the same tumor. The majority of the tumor tissue is of the sarcomatous variety and usually appears wildly malignant. Hemorrhage and necrosis within the tumor, sometimes leading to rupture of the capsule, are not uncommon, and invasion of the renal vein or renal pelvis also occurs.

This tumor originates in the kidney and is probably of congenital origin. There have been many theories advanced as to its histogenesis. Among these are: (1) Aberrant germ plasm, (2) Wolffian body rests, (3) stray cells from the myotome or sclerotome, (4) from renal blastema or nephrotome, (5) cells from the embryonic structure of the true kidney which metamorphosed into cellular structures of various kinds. There is much controversy over this subject. Ewing's⁷ theory of origin from the renal blastema is the most widely accepted, but there are those who believe that the origin may be due to several different factors rather than to any one single cause.

SIGNS AND SYMPTOMS

These tumors usually attain a tremendous size before they become symptomatic. For this reason, the most common presenting symptom is the discovery of a mass in the abdomen, usually by the mother while bathing the child. They will usually insist that the mass arose suddenly, as it had not been noticed previously. It is noteworthy that medical advice may

not be sought for as long as three months after the discovery of the mass.

The length of time that the tumor has been growing is inestimable. Some observers believe that it is a congenital tumor, growing since before birth of the child, and does not become apparent until it has attained a large size. There does not appear to be any correlation between the duration of symptoms and the prognosis. Cases reported immediately following the discovery of the mass may die in two to three months, whereas those who have had a mass for several months prior to treatment may survive for periods exceeding ten years. There does appear to be some correlation between the age of the child at the time of discovery of the mass and the prognosis. Ladd and White² stated that in their experience the younger the child at the time of discovery, the better is the chance for cure.

Once the mass has been discovered, it usually grows rapidly, and very frequently causes symptoms by pressure on surrounding structures, particularly the gastrointestinal tract. From pressure on adjacent organs these children sometimes have vomiting, abdominal pain, anorexia, irritability or listlessness, malaise, weight loss and fever. They may even develop signs of partial or complete intestinal obstruction.

Because of the fact that the tumor is well encapsulated and does not usually break through into the renal collecting system, hematuria is not an important early symptom. It does occur infrequently, but is not a reliable sign, and normal urinary conditions are the usual finding.

DIAGNOSIS

In the diagnosis of Wilms' tumor, the age of the child is of importance, as most cases are found before the age of five. The sex and side involved are not helpful. The correct diagnosis is arrived at largely from the clinical history, palpation of the abdominal mass, and by supporting evidence of pyelographic studies.

The history will consist mainly of the sudden appearance of abdominal swelling and the palpation of the mass by some member of the family. Systemic symptoms may or may not have been present.

On physical examination the tumor mass can frequently be seen, and its outline may be mapped out thoroughly by palpation as there is no tenderness or muscle spasm of the abdominal wall. The tumor is usually firm, not movable, smooth with rounded edges, extending to the midline and from the costal margin into the iliac fossa.

Because of the age of these patients, it is felt best to use intravenous in preference to retrograde pyelography. The pyelographic findings are not always pathognomonic. The most frequent findings are a displaced renal pelvis, either upward or downward, according to the position of the tumor. The affected kidney will usually show some function, whereas, a

lack of function on the involved side would suggest a hydronephrosis or other renal disease in which the excretory function of the kidney had been damaged. In this case, retrograde pyelography would be indicated. The pelvis may sometimes be pushed toward the midline. Of most importance in doing pyelography in a suspected case of Wilms' tumor is the establishment of the presence and normality of a kidney on the opposite side.

There are other pathological conditions which can cause the appearance of an abdominal mass in young children. To be differentiated are: (1) Hydronephrosis, (2) adrenal neuroblastomas, (3) pyonephrosis, (4) congenital polycystic kidneys or, (5) hypernephroma.

METASTASES

Metastases are by way of local extension and infiltration. After the tumor breaks through its capsule it very rapidly sends out projections into the surrounding tissues. It is only late in the disease that extension and invasion into the blood stream and lymphatics may take place. When this does occur, there may be metastases to the lungs, brain or bones, but all of these are rare.

There is marked tendency to local recurrence even though the lesion has been found early and a thorough extirpation done.

TREATMENT

There is a great deal of controversy as to the proper treatment of Wilms' tumor. Treatment resolves itself into one of the following: (1) Nephrectomy alone, (2) nephrectomy and postoperative irradiation, (3) preoperative irradiation and nephrectomy, (4) nephrectomy with preoperative and postoperative irradiation or, (5) irradiation alone.

Although Wilms' tumor is very sensitive to x-ray therapy, practically all urological surgeons and pathologists are agreed that no case of proven embryonal adenomyosarcoma has ever been cured by irradiation alone. Malignant cells can always be found in the tumor following the administration of the maximum amount of therapy which can be given.

The greatest controversy arises as to whether to give preoperative irradiation. Since Wilms' tumor is a markedly radiosensitive tumor, the effect of irradiation is to diminish its size in a relatively short period of time, thus rendering the operative procedure technically less difficult. Those who are opposed to preoperative x-ray therapy feel that the four to six weeks period, which would be necessary to obtain the optimum effect of irradiation, allows too great a possibility for metastasis. There is absolutely no way of knowing when metastasis takes place. Very frequently a recurrence of the tumor growth in the lungs or in the renal fossa occurs in a case in which there was no evidence of local extension or invasion of the renal vein at operation. For this reason, the advocates of immediate nephrectomy feel that a matter of one month, one week or one day may mean the difference

between cure and eventual recurrence.

Everyone is convinced of the importance of post-operative x-ray therapy, and it is given to practically all cases following nephrectomy. X-ray sometimes may be of palliative value when used on the metastatic lesions, particularly those in the lung.

OPERATIVE TECHNIC

Formerly, the surgical approach to this tumor has been almost exclusively by the postero-lumbar route. This approach has been largely abandoned because of the inability to expose the renal pedicle and ureter early in the procedure. It is felt that manipulation of the tumor before the pedicle and ureter have been tied may allow tumor cells to be squeezed out into the circulation, thus actually causing metastasis.

Most surgeons use the transperitoneal approach today. In the cases here reported the approach was through a vertical pararectus incision which was extended from its center, laterally into the flank, thus creating a T-shaped incision. The upper and lower flaps could be easily reflected, thus giving very wide and adequate exposure. The lateral parietal peritoneum was then incised over the tumor mass, and every effort was directed toward an early ligature around the renal pedicle and the ureter. These were cut and tied, then the tumor mass was removed. The renal fossa was drained through a small lateral flank stab wound, using one Penrose drain. An effort was always made to peritonealize the renal fossa, but this was not always feasible and did not seem to cause any untoward effects if it was not done. The one disadvantage of the T-shaped incision was the retarded healing at the point where the two incisions meet. This was not particularly troublesome as all the incisions eventually healed, making a strong, not unsightly scar.

REPORT OF CASES AND DISCUSSION

The age of onset ranged from 14 months to seven years and eight months (Table 1). The duration of the history ranged from one day to three months. The predominant presenting symptom was that of a palpable tumor mass in the abdomen. There was only one case with a presenting symptom of hematuria.

One case in particular is worthy of note. H. R., (#99782—Roper Hospital), aged five years, was admitted to the hospital with a history of sudden onset of nausea and vomiting, distention of the abdomen, anorexia and malaise of four days duration. The initial presenting symptoms were suggestive of a partial obstruction. On physical examination a right-sided abdominal mass could be palpated, extending from the right upper quadrant downward and disappearing well below the margins of the bony pelvis. On rectal examination, this mass could be palpated alongside the rectal wall. This patient, after thorough investigation, including retrograde pyelograms, was suspected of having a Wilms' tumor and was given a course of radiation therapy prior to exploratory laparotomy, at which it was found that he did have a renal tumor

which had extended down the great vessels into the pelvis. Biopsy confirmed the diagnosis of Wilms' tumor.

There is also noted a predominance of males over females, but an equal distribution of the sides involved (Table 1). Three of the cases were considered inoperable upon initial examination. The remainder were treated with preoperative and postoperative irradiation therapy and nephrectomy. Two of our patients are living for two and four years, respectively, following surgery, without evidence of recurrence. Although 25% of the reported cases are living, there are no five-year cures. It is generally considered that, if a patient survives for two years following nephrectomy, the chances of a five-year survival are good.

It is felt that the treatment should consist of a preliminary course of x-ray therapy for a period of seven to ten days. This will usually give sufficient shrinkage of the tumor mass to facilitate surgical excision, and it is felt that this delay is justifiable. However, a delay of four to six weeks for the purpose of irradiation therapy is dangerous and not justifiable. X-ray therapy should not be used preoperatively if the tumor is sufficiently small to permit easy surgical access.

Rusche,³ in a recent report of 40 cases of Wilms' tumor, concluded that preoperative, as well as postoperative irradiation therapy was indicated. It seems, since this is a malignancy which has a notoriously high mortality, that one is justified in utilizing every known useful procedure in our armamentarium, i. e. radiation plus surgery.

It is evident that the mortality rate in this malignancy is appalling. The answer is not at all apparent. Early diagnosis is not always a sign of good prognosis, but since it is the best we have to offer at present, an earnest plea is made for every physician who is ex-

amining and treating children, to develop a renewed interest and suspicion in an effort to make an early diagnosis and give these children every possible chance for cure.

SUMMARY

A brief review of the history, pathogenesis and pathology of embryonal adenomyosarcoma or Wilms' tumor is presented. The differential diagnosis and treatment are discussed. Eight cases of Wilms' tumor treated at the Roper Hospital in the past ten years are presented in tabular form, including one case which had very early extensive metastases. The importance of early diagnosis of Wilms' tumor is emphasized.

187 Calhoun St., Charleston, S. C.

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Table 1	Age At Onset	Duration of History	Presenting Symptom	Sex & Race	Side Affected	Metastasis Present on Admission	Metastasis Later	Type Treatment	Length of Life After Diagnosis
Case 1 J. M. G. R. H. #112715	7 yrs. 8 mo.	3 wks.	Epigastric pain. Mother felt mass in left side.	Colored Male	Left	Lungs and Lymphatics		Inoperable. Died 38 days post-admission	38 days
Case 2 S. M. P. R. H. #4884	21 mos.	1 mo.	Mother felt slowly growing mass in left abdomen	White Female	Left	No	No evidence	Inoperable	7 mos.
Case 3 W. E. F. R. H. #28698	3 yrs.	3 wks.	Mother felt mass in left side of abdomen	Colored Female	Left	No	No evidence	Preoperative radiation followed by nephrectomy	4 mos.
Case 4 J. G. R. H. #60314	2 yrs.	3 days	Scrotal swelling & hematuria	Colored Male	Left	No	No evidence	Preoperative & postoperative radiation & nephrectomy	Alive 4 yrs
Case 5 C. E. P. R. H. #60516	26 mos.	3 mos.	Mother felt mass in side	Colored Male	Right	No	No evidence	Preop. and Postop. radiation & nephrectomy	19 mos.
Case 6 C. D. H. R. H. #40142	4 yrs.	6 wks.	Mother felt hard mass in right side	Colored Male	Right	Extension to aorta and vena cava	Same	Preop. and Postop. radiation & nephrectomy	20 mos.
Case 7 J. K. H. R. H. #80933	14 mos.	1 day	Mother felt hard mass in right side	White Male	Right	No	No	Preop. and postop. radiation & nephrectomy	Alive 2 yrs.
Case 8 H. R. R. H. #99782	5 yrs.	4 days	Nausea, vomiting, abdominal swelling	Colored Male	Right	Yes-marked even into pelvis. Int. obst.	Yes	Exploratory lap. following radiation therapy	2½ mos.

THE PRESIDENT'S PAGE

The autumn is a time of many district meetings. The president has been invited to most of these meetings and has been given an opportunity to speak briefly on State Association affairs. Because of our poor mail facilities, two invitations did not reach my desk until after the date of the meetings. Then there have been conflicts in meeting dates, which made it impossible for me to accept all invitations. However, I have attended such meetings as I could, and I have appreciated the opportunity to meet with my colleagues and to take part in their programs.

The scientific programs of the district meetings have been of an unusually high order and fine teaching value. In most instances, an effort has been made to secure experienced teachers to deliver the lectures and there has been a trend to conform to "recent progress in various branches of practice" type of talks.

X X X

South Carolina physicians are having this year an excellent opportunity to refresh and bring up to date their medical knowledge and practical applications of that knowledge. Several of the larger societies have monthly programs of high teaching quality, and these meetings are attended by physicians from beyond the county borders. The district meetings this year have been fine. The Academy of General Practice had an unexcelled program in the summer. The Piedmont Post-Graduate Assembly had the best of its always fine programs this year. The Medical College faculty, in collaboration with the Academy of General Practice,

will put on a well planned refresher course in late October. This course will deal with the subject of diabetes in all of its phases. A large enrollment is expected. The M. C. H. Division of the State Board of Health collaborated with similar divisions of the Georgia and Florida State Boards of Health, to arrange and put on, perhaps, the finest teaching program on clinical obstetrics that will be given anywhere this year. Over 200 physicians registered for the seminar, and many of these were from South Carolina. This course was given at Daytona Beach. For those who would travel farther and stay longer, there are the usual national and sectional, general and specialty meetings. The annual meetings of the state specialty societies welcome visitors to their fine sessions.

X X X

Dr. Charles Wyatt, councilor for the Fourth District, is setting a record. He has already visited most of the county societies in the district, and has discussed various State Association matters, bringing the men up to date and urging consideration and discussion of business which will come up at the next annual meeting. I sincerely hope that other councilors are doing likewise. The councilor is the liaison officer between the State Association and the county societies, and one of his duties is to keep the members of the latter informed regarding State Association problems and to stimulate and maintain interest in these problems.

J. Decherd Guess

The Journal of the South Carolina Medical Association

EDITOR: Julian P. Price..... Florence, S. C.

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8 $\frac{1}{2}$ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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NOVEMBER, 1951

FEDERAL AID TO MEDICAL EDUCATION

S. 337 (the bill which would provide federal aid to medical, dental, and nursing education) received full and vigorous debate recently in the Senate. It was finally recomitted to committee, which means that it will not be voted upon this year or perhaps not in this session of Congress.

We have recently received a copy of the Congressional Record carrying the speeches and arguments which were made, and we recommend its reading for instruction and enjoyment.

The main arguments for the passage of the bill were: (1) the increased cost of medical education which the medical schools are unable to carry at the present time, (2) the present shortage of physicians, dentists, and nurses, (3) the increased cost of medical education to the student, (4) the inability of private sources of income to meet the needs of the cost of medical education, (5) the great need for expanding the physical plants and facilities of our medical schools, (6) the inability of states to carry the financial load of state supported schools.

The arguments against the passage of the bill were: (1) whether there is an actual shortage of physicians is debatable, it is more a question of poor distribution, (2) it is an added expense which this country can ill afford to assume at the present time, (3) it is a bill which puts entirely too much power in the hands of the Surgeon of the Public Health Service who would administer the program, (4) it will destroy the intellectual independence and freedom enjoyed by medical schools at the present time, (5) although it is proposed to have this as a five year program it will inevitably continue as a greatly expanded permanent program, (6) the problem of medical schools is primarily one of the individual states rather than one of the federal government, and to make it one of the federal government is to encroach upon the domain of the states and their individual rights.

The main arguments in behalf of the bill were presented by Senators Pastore (R. I.), Murray (Mont.), Lehman (N. Y.), Benton (Conn.) Humph-

rey (Minn.), and Kerr (Okla.). Those leading the fight against the bill were Senators Dirksen (Cal.), Carlson (Kan.), Taft (Ohio), Brecker (Ohio), and Maybank (S. C.).

What the eventual outcome of the bill will be no one can foretell. It would seem to depend upon two factors: whether the present bill can be so modified or changed as to eliminate certain of the features which are now objectionable to many Senators, whether sufficient funds can be raised through private and voluntary contributions to ease the present financial hardships of the medical schools.

SELF MEMORIAL HOSPITAL

As we go to press plans have been announced for the opening of the Self Memorial Hospital in Greenwood on November 1. Mr. J. S. Self, textile executive, is building the hospital for Greenwood and we join with the people in his community in thanking him for this great gift which will be not only an honor to Greenwood but to the entire state.

It will be a 179 bed, six story building, air-conditioned throughout. An inter-communication system will allow a patient in any room to talk with the nurse in charge on that floor. The delivery and operating rooms have flash-proof electrical connections. There are covered recesses along the corridors so that the stretchers can be put out of sight and are out of the corridor. Near the main entrance is a soda shop and there is a comfortable lounge on the maternity floor where fathers may do their pacing.

The basement has the out patient department, physical therapy, dressing room for employees, and storage. Administrative offices are on the first floor along with the X-ray and laboratory departments, the cafeteria and kitchen. On the second floor will be room for pediatric and medical patients, and the third floor will house medical patients. The maternity department, delivery suite, and nursery are on the fourth floor. The fifth will be occupied by the operating suite and surgical patients.

Many of the newer features came from ideas Mr. Self gathered from discussing the plans with leaders in hospital construction and from visits he had paid to other institutions. He, along with the architects and Mr. W. W. Lowrance, the administrator, have built a hospital which will be the pride of Greenwood and the envy of many another community. But it is the rare city which has as one of its citizens a far-sighted benefactor of the type of Mr. J. S. Self.

DANIEL L. MAGUIRE

In the death of Daniel Laurence Maguire, formerly clinical professor of surgery emeritus, the Medical College of the State of South Carolina has lost a capable and devoted teacher; the medical profession, an ethical and respected practitioner; and the state, a steadfast and loyal citizen.

Educated in the schools of Charleston, Dr. Maguire was a shining example of the soundness and breadth of culture which prevailed in the educational system of Charleston during the early part of this century. At the High School of Charleston and the College of Charleston he came under the influence of such scholars as della Torre, Randolph, Harris and Stephenson. From these he obtained a love for good learning and sound thinking which embellished his life.

Dr. Maguire was born in Charleston, November 15, 1882. He was educated in city public schools and the High School of Charleston and was graduated from the College of Charleston in 1903 with a degree of Bachelor of Arts. He then entered the Medical College and received his medical degree in 1907. Later he took several postgraduate courses in New York and trained further at the Mayo Clinic and at hospitals in New York and Philadelphia.

Dr. Maguire practiced in Charleston for more than 35 years. He joined the teaching staff of the Medical College in 1914 and served as professor in the department of surgery until his resignation last June. He was made clinical professor of surgery emeritus during the 1950 commencement exercises at the Medical College.

He was chairman of the executive staff of St. Francis Xavier Infirmary and was one of the visiting surgeons of Roper Hospital. He also was vice chairman of the board of trustees of the College of Charleston and was physician to that college.

Dr. Maguire was an active member and vestryman of the Roman Catholic Cathedral of St. John the Baptist. He was past president of the Charleston County Board of Health and an executive committeeman and trustee of medical and educational institutions in Charleston.

As a man and physician he was always held in the highest respect. It is impossible to think of Dan Maguire doing a small or mean thing. His devoted family life and the regard of the community attest to his high character and ideals. Into any group Dan Maguire brought a warm sincerity, a loving friendli-

ness which endeared him to all his friends. In his death all of us who came in contact with him have lost someone irreplaceable.

O. B. C.

DIABETES WEEK

November 11 to 17 has been designated as Diabetes Week by the American Diabetes Association and will spearhead its nationwide diabetes detection drive. County Medical Societies and individual physicians are urged to lend their support to this enterprise.

The American Diabetes Association was organized in 1940 by a group of physicians who were greatly concerned with the growing problem of diabetes in this country. Its objectives are: to find the greatest number possible of yet-undiscovered diabetics, to assist diabetics in their effort to lead normal lives, to improve the treatment of diabetes, to bring the newest information about the disease to all interested physicians, to encourage and support research on diabetes, to promote public knowledge about diabetes and understanding of the individual diabetic's problem.

It has been estimated that there are about one million unknown diabetics in our national population and it is toward these that the annual Diabetes Week with its detection work is aimed.

PSYCHOSOMATIC CONFERENCE FOR THE G. P.

The South Carolina State Hospital, in its role as State Mental Health Authority, will hold a one-day conference on "The Recognition and Practical Management of Psychosomatic Problems in General Practice," in Columbia, December 6, 1951.

In describing the scope and purpose of the Conference the sponsors state, "that an invitation will be sent to each of the thirty-eight Medical Societies requesting them to designate a number of representatives to attend the Conference. At the Conference the representatives will hear a nationally-known expert in the field of psychosomatic problems present the current research data on the physiological basis for these disorders. In a second discussion he will present material on the clinical management of a common psychosomatic problem such as ulcers, hypertension, or asthma.

"It is our hope that each local Medical Society will afford themselves of the opportunity not only to hear this material but to join in a discussion at the end of the day on how a more extensive picture of psychosomatic problems can be carried to the local general practitioners of the State. It is our hope that the representatives present can make suggestions that can provide us a qualified and practical program of post-graduate education in psychosomatic medicine.

"As you can see, this meeting has two purposes: 1. To give the representatives who come a typical example of the problems that can be presented, and 2. To formulate plans for carrying on a more extensive program of this character to the physicians of the State."

INSECTICIDE POISONINGS

With the widespread use of organic phosphate insecticides in agriculture (spraying cotton, fruit trees, etc.) the possibility of poisoning of humans should ever be kept in mind. A positive means for excluding such a possibility is afforded through blood cholinesterase determinations. Such determinations are now available through the U. S. Public Health Service at the following laboratory:

U. S. Public Health Service
Communicable Disease Center
Technical Development Services
P. O. Box 769
Savannah, Ga.

Here are the instructions for drawing, preparing, and shipping blood samples for cholinesterase determinations:

Blood should be taken by venipuncture from the arm of the subject by the ordinary procedure, using sterile equipment. Heparin is the anticoagulant of choice, and the minimum amount to prevent clotting should be used, so as to dilute the blood sample as little as possible. Merely wetting the syringe with heparin is sufficient. Sodium citrate may be used if heparin is unavailable. The blood should be carefully transferred from the syringe to a clean, dry 15-ml. graduated centrifuge tube by gentle pressure on the plunger. The needle should be removed, and the aperture of the syringe should be placed in contact with the side of the tube before the blood is forced

out. These precautions are necessary to prevent hemolysis. Ten milliliters of blood should be drawn and processed to insure adequate amounts of material for cholinesterase analyses in duplicate to be done.

The collected blood is centrifuged for 15 minutes at 2,000 rpm, and the plasma is separated. The plasma may now be placed in a clean, dry test tube of suitable size, closed with a tight-fitting rubber stopper, and plainly labeled. The plasma is now ready for shipment.

The cells are mixed with three times their volume of isotonic saline (0.9 percent sodium chloride) solution in the same centrifuge tube and again centrifuged at 2,000 rpm for 15 minutes. After discarding the supernatant fluid the operation is repeated, centrifuging this time for 20 minutes at 2,000 rpm. (In this final centrifugation the packing of the red cells is a critical point, and the recommended speed and time of centrifugation should be rigidly followed.) The volume of the cells is noted, and then the saline supernatant is removed to the point where the remaining volume of saline and cells is twice the volume of cells alone. The cells are then mixed thoroughly with the remaining saline. This mixture is then transferred to a clean, dry test tube, stoppered with a rubber stopper, and labeled. The red cells are now ready for shipment.

Both plasma and cells must be kept refrigerated during shipment. It has been found convenient to individually wrap test tubes in cotton batting, place them in a tin container of suitable size with a screw or press-on cap, and then place the whole inside a large Thermos or picnic jug packed with ice. It is recommended that shipments be made by air express, if feasible, in order to preserve adequate refrigeration for the samples during the entire period of shipment. Shipment may be made by slower forms of transportation provided that the samples are iced periodically.

HISTORICAL SIDELIGHTS

(A copy of the following document was recently sent to us by Mrs. T. O. Lawton of Fairfax and we publish it for its historical interest and to preserve it as a permanent record of our Association. Mrs. Lawton is the grand-daughter of Dr. Wm. S. Johnson, one of the signers. Editor.)

BARNWELL DISTRICT 1841

The physicians of Barnwell district, to its inhabitants:

Whereas the Bill of Medical Fees established by the medical society of the Barnwell district, in the year 1832, is defective in many particulars, and obscure to others; the undersigned, regular practicing physicians, adhering to the rates therein laid down and conforming to the principles thereof, for the government of ourselves, have this day agreed to the following fee bill. To patients who are unable to pay, we will as heretofore, continue to extend every attention which humanity requires; but from all others who may think proper to employ us, we expect payment of bills promptly and without dispute, whenever they do not exceed the following rates, viz:

For a visit in the day -----\$ 1.00
A visit required after dark ----- 2.00

A visit requested from bed -----	5.00
Mileage in the day, per mile -----	.50
Mileage in bad weather, per mile -----	1.00
Mileage at night, per mile -----	1.00
Mileage at night in bad weather -----	2.00
Attendance on patient per hour -----	1.00
Consultation -----	10.00
Medical consultation given by letter or otherwise -----	1.00 to 5.00
Vomit or purge -----	.50
Mixtures or decoctions or infusions -----	.25 to 1.00
Dose of active medicine -----	.25 to 1.00
Blistering plasters -----	.25 to 1.00
Giving advice after going to bed -----	2.00
For attending case in court involving medical opinion -----	15.00
<i>Surgery</i>	
To operate on trepan -----	40.00
Amputation, large limbs -----	40.00
Amputation, finger or toe -----	5.00
Bleeding in common vein -----	1.00
Bleeding in jugular vein -----	5.00
Arteriotomy -----	5.00
Lancing gums, children -----	1.00
Cupping -----	4.00

Dressing wounds and ulcers -----	.25 to 2.00	Sewing wounds, per stitch -----	1.00
Extracting teeth -----	1.00	Extracting small objects from	
Extracting polyps -----	15.00 to 50.00	esophagus or other passages -----	2.00 to 20.00
Opening abscess -----	1.00 to 5.00	Reducing prolapsed uterus -----	5.00 to 10.00
Introducing catheter -----	1.00 to 5.00	Reducing prolapsed anus -----	2.00 to 5.00
Introducing seton -----	2.00	Radicle cure hydrocele -----	30.00
Reducing luxiated humerus or femur -----	40.00	Scarrifying tonsils -----	1.00
Reducing small joints -----	5.00 to 10.00	Extirpation testicle -----	30.00
Diving freonum tongue or penis -----	1.00 to 5.00	Opening finger or thumb, paronychia -----	2.00
Setting fracture humerus or femur ----	20.00 to 40.00	Other operation to be governed by Charleston	
Setting leg or forearm -----	10.00 to 20.00	fee bill.	
Setting rib or clavicle -----	5.00 to 10.00	<i>Midwifery</i>	
Fistula in ano -----	10.00 to 20.00	For attendance on common and natural labor --	30.00
Operation lachrymalis -----	10.00 to 20.00	Difficult and tedious labor -----	40.00
Operation of paracentesis -----	5.00 to 10.00	Cases requiring instruments -----	60.00
Harelip -----	10.00	Visits and advice to midwives -----	10.00
Operation ranula -----	10.00	Extracting placenta -----	10.00 to 30.00
Phymosis -----	5.00	Signed: J. W. Tarrant, Wm. S. Johnson, C. K. Ayers,	
Reducing hernia -----	5.00 to 10.00	L. J. Trotti, B. S. Sweat, B. G. Moss, J. J. Harley,	
Administration of enema -----	2.00	John H. Harley, Smith Warner, J. H. O'Cain, L. S.	
Treatment of gonohrhea or gleet -----	10.00	Hay, James W. Robert, John M. Turner, F. J. Hay,	
Treatment of syphilis -----	20.00	Wm. H. Hagood, J. M. Badger, R. C. Fowke, J. W.	
Tying small arteries -----	5.00	Duncan, James O. Hagood.	
Tying large arteries -----	50.00	April 1, 1841.	

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

DIRECTORY PREPARATION BEGINS

During the week of October 19th and shortly thereafter, questionnaires were mailed to all members of the Association for the purpose of securing the information to be included in the new issue of the Association's Directory. The questions were printed on a double post card so that all that the member had to do was to fill in the blanks providing the necessary information and mail the card, which was already addressed, to the Association's office in Florence. The response has been good and as this is written—less than a week after the first mailing—about 300 of the cards have been returned. If any member of the Association has failed to receive a card he is requested to immediately notify the Florence office and one will be sent to him. It is planned to send the material to press about the first of December and to have the Directory ready for distribution the early part of the year.

The Directory apparently has served a useful purpose and proved to be a source of valuable information judging from the numerous requests received for extra copies both from members of the Association and from others in the past. It is published as a phase of the activities of the Journal and one copy is distributed to the members of the Association without extra charge.

REENTER—THE COUNTRY DOCTOR

The New York Times of Sunday, October 14th, commented editorially upon the movement instituted by the Committee on Medical Service of the A. M. A. toward luring doctors away from the larger centers of population and into small towns and rural communities. Recognizing the attempts which have been made separately in a number of local communities, the A. M. A.'s committee, planning for more even distribution of medical care, is seeking to coordinate these local plans on a national scale. The Times observes:

"What enterprising states have done forms an interesting prologue to the broadening drama on which the casting committee of the A. M. A. is working. In their small-town and rural theatres of medicine they have been industriously (and with the aid of the doctors themselves) building and painting sets to make the scene more attractive to young physicians.

"A generation ago a physician might spend only about 30 per cent of his working time actually treating patients. Today the proportion of treatment-time is nearer 90 per cent of his working day. But to spend his time so productively as this requires hospital and clinic facilities close at hand. These are being drawn to the scale of need in the local community, and small hospitals and health centers form an essential part of

(The Council on Pharmacy and Chemistry of the American Medical Association has adopted the following statement of Actions and Uses and of Dosage for publication in connection with a description of Banthine Bromide for inclusion in New and Nonofficial Remedies)

METHANTHELINE BROMIDE.—*Banthine*[®]Bromide (Searle)

β -diethylmethylaminoethyl 9-xanthenecarboxylate bromide

Actions and Uses.—Methantheline bromide, a parasympatholytic agent, produces both the peripheral action of anticholinergic drugs such as atropine and the ganglionic blocking action of drugs such as tetraethylammonium chloride. Tolerated amounts of methantheline bromide exert side effects typical of atropine-like drugs, but cause less tachycardia, and also less postural hypotension than does tetraethylammonium chloride. Toxic doses produce a curare-like action at the somatic neuromuscular junction.

Clinical studies indicate that the drug effectively inhibits motility of the gastrointestinal and genitourinary tracts and, to a variable degree, diminishes the volume of perspiration and salivary, gastric and pancreatic secretions. It also decreases mucoprotein secretion. Like atropine, it produces mydriasis and cycloplegia when applied locally to the eye or administered systemically, but until more clinical evidence becomes available, its local use for this purpose is not recommended. The value of the drug for preventing abnormal cardiac reflexes through the vagus during thoracic surgery, or as an agent for routine preoperative medication in place of atropine, requires further investigation before final conclusions can be reached.

Methantheline bromide is indicated for clinical use whenever anticholinergic spasmolytic action is desired, provided it is not contraindicated because of its atropine-like characteristics or because of a patient's intolerance to the unavoidable side effects of such therapy. It is useful as an adjunct in the management of peptic ulcer, chronic hypertrophic gastritis, certain less specific forms of gastritis, pylorospasm, hyperemesis gravidarum, biliary dyskinesia, acute and chronic pancreatitis, hypermotility of the small intestine not associated with organic change, ileostomies, spastic colon (mucous colitis, irritable bowel), diverticulitis, ureteral and urinary bladder spasm, hyperhidrosis or control of normal sweating which aggravates certain dermatoses, and control of salivation.

Methantheline bromide produces some degree of cycloplegia and mydriasis in therapeutic doses and

therefore should not be administered to patients with glaucoma. It sometimes decreases the ability to read fine print. Xerostomia (dryness of the mouth) is a common, sometimes transient, side effect. Urinary retention of varying degree may occur in elderly male patients with prostatic hypertrophy, and some patients may have difficulty emptying the rectum. Patients with edematous duodenal ulceration may experience nausea and vomiting during initial administration of the drug. These patients should take only liquids during the institution of drug therapy. All patients should be advised of the possible occurrence of side effects. Overdosage sufficient to produce a curare-like action may be counteracted by prompt subcutaneous injection of 2 mg. of neostigmine methylsulfate.

Dosage.—Methantheline bromide is administered orally or parenterally by either the intramuscular or intravenous route. Parenteral administration is not advised for patients able to take the drug orally. The average initial adult dose, oral or parenteral, is 50 mg. For patients with considerable intolerance, 25 mg. may be employed. In the management of peptic ulcer, a beginning schedule of 50 mg. three times daily before meals and 100 to 150 mg. on retiring is suggested. However, the usual effective dose is 100 mg. four times daily, although some patients may require more or less than this amount. The dosage may be increased to tolerance, using dryness of the mouth as a guide, and adjusted to meet the individual response of patients. Maintenance dosage in peptic ulcer is usually considered to be about one-half the therapeutic level. In the management of other hypermotile or hypersecretory states, the dosage should be adjusted to the smallest amount which will relieve the symptoms. When spastic conditions are secondary to inflammatory or other organic lesions, therapy directed toward the cause should be employed whenever possible.

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the scene. The Hill-Burton Act with its federal grants-in-aid to states and local communities has helped to promote the program of voluntary medical planning."

Part of the job, as the editorial points out, is putting the right doctor in the right place. A young doctor graduating from a Class A medical school and having served his internship or a residency, may have the finest scientific and technical training and equipment available. As the Times states, the A. M. A's committee and others interested in the movement recognize that this is not all that is necessary for, as the editorial states, "To fit into the small town or county seat role he must be the spiritual kinsman of the old country doctor and possess a flair for people and for country life." The committee believes "that the country doctor would return in modern dress if there were some appropriate retouching of the medical scenery."

A LEGISLATOR VIEWS MEDICINE

Honorable Richard M. Nixon, of Whittier, California
United States Senator from the State of California

I would like to say at the outset, for the benefit of our Southern friends here, that I think some explanation in regard to our peculiar political situation in California probably is in order.

I am often asked how it is possible for a Republican to get votes from Democrats in a state where there are a million more Democrats than there are Republicans. That, of course, is the situation in our State. Part of it is due to the way that we campaign. We campaign on the issues rather than on our party labels. I think also that part of it is due to the fact that we have various kinds of Democrats in California. There are some kinds of Democrats who generally vote for Republican candidates, particularly if they don't happen to like the issues for which the Democratic candidate may stand.

I recall an incident which occurred toward the end of our campaign late last October, which I think will illustrate the point and bring it home to our Southern friends, and also, to some of our friends from the East.

I was riding from Los Angeles out into Orange County for one of ten speeches I was making that day. As was usually the custom in those cases, I was reading my notes for the speech that was to come. I remember the car pulled up to the intersection of Sixth and Main in Los Angeles, for a stop light. All of a sudden the door was opened and I almost fell out. A big brawny fellow grabbed me by the arm and said, "You're Mr. Nixon, aren't you? I recognize you from your pictures." I answered after getting my breath that I was.

He said, "I want to tell you that I'm a Democrat. I come from New York and I'm Irish." (I wouldn't have guessed it, of course.)

He said, "I want to tell you that in spite of the fact that I'm a Democrat, if you don't beat that woman on November 7, I'm going to move back to New York."

I might say also, in addition to some New York Democrats, we had a few southern Democrats who voted for us last November.

Let me say, too, that I have been very much impressed, as I am sure you have, with the splendid presentations which have been made by the speakers who have preceded me. I know that their performances impose upon me the very difficult responsibility of keeping the standard of the program at the high level it has already reached.

I feel, too, that it is incumbent upon me to express my congratulations to the members of this group, and to the medical profession generally, for the very splendid political action the medical profession took in the last campaign leading up to the November election, and in other previous campaigns. As a result of that action, I think we can safely say that the representation that you have in both the House and the Senate of the United States is such that there is no chance whatever at this time for any type of compulsory health insurance program to be enacted.

It is well, however, to issue a note of warning at this point. Under no circumstances should the members of the medical profession assume a smug or complacent attitude about the future. I don't think any legislation will be passed in the 82nd Congress, as I have indicated. On the other hand, I think you must recognize, and that all of us who are interested in this fight must recognize, that those who favor such legislation will continue to work fanatically for their cause, in the hope that somehow, sometime in the future, they will be able to accomplish their purpose. In meeting their efforts, I think we should recognize two fundamental rules.

One, that a good offense is the best defense we can have under any circumstances, whether it is in a football game, on a battlefield, or in a political fight. Second, that actions speak louder than words.

We are confronted in this case with a great political issue. I know that as far as words are concerned, a very effective job has been done on this issue. I think that the great majority of the people in the country are convinced at the present time that we have the highest standard of medical care in the World right here in the United States of America.

I think, too, that a great number of people, probably a majority of the people in the country, are convinced that the compulsory health insurance programs which sound so good in theory have not worked out in action in those nations which have tried them. You would think, then, that this would be enough to win the battle, but by the same token we must recognize that in the game of politics, the political climate can

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change and it can change sometimes very, very swiftly. If we have a shift to the left as a result of a change in political climate, you can be sure that those who favor compulsory health insurance and socialization in other fields, as well, will be back at the old stand, and without question, they will constitute a real threat, insofar as their ability to put those programs into effect is concerned.

Voluntary Action Needed. Therefore, I say that some action is needed, as well as words. I think that in complete candor we should recognize that the present system of distribution of medical care in the United States is not perfect. I don't say that in a critical fashion, because as I said at the outset, I am one of those who believes that we have the finest system of medical care in the World at the present time. There, nevertheless, are imperfections, I think most of us agree, which do exist. Those imperfections, as long as they do exist, are the basis for the arguments which the proponents of government medicine constantly use to sell their programs. I feel that wherever possible, the medical profession should in the future take voluntary action which will reduce the imperfections, recognizing, of course, that there will never come a time when we will have a completely perfect system that will satisfy everybody.

I am convinced that the medical profession has taken a very long step in the right direction with its recently announced program of subsidizing medical schools on a voluntary rather than on a government basis.

I would suggest also that additional voluntary action is needed in two fields. One of them already has been touched upon by Mr. Abels in his comments, in the field of getting a better geographical distribution of medical care and hospital facilities throughout the country in areas of need. The second deals with the problem of encouraging wherever possible voluntary health insurance programs. It seems to me that the objective toward which we should work in the United States is a system where eventually anybody who wants health insurance can get it—where those who should have health insurance are encouraged to get it—but where no one in the United States is compelled to take out such insurance against his will.

If the profession adopts that objective we will remove by voluntary action the strongest arguments that the proponents of government control of the medical profession have at the present time.

Now, with that introduction concerning a specific problem with which you are directly concerned, I want to inject a note of criticism in regard to the potential political action I believe the medical profession should take in regard to other problems.

The Physician and Politics. As I have said, I think the profession is to be congratulated for the very effective political job it has done in the field of compulsory health insurance. I think it is to be congratulated for that job because they pay off on the results and the results speak for themselves. But, by

the same token, in recognizing that the medical profession has proved it can be effective in the political field, it seems to me rather tragic that as far as apparently a majority of the members of the profession are concerned, they do not and will not become interested in political issues and in political candidates, unless those issues happen specifically to affect the profession of which they are members.

Now, there are some notable exceptions and I recognize that many of the exceptions may be present right here in the room today. But I believe it is essential that all members of the medical profession recognize that an attempt to socialize any American profession—any American institution—constitutes a threat to all. If we understand this, it seems to me that from a selfish standpoint, the members of the medical profession should become interested in political campaigns and remain interested in political affairs, because by objecting to, avoiding and defeating programs which would socialize other institutions or professions, they will be taking very effective action in behalf of their own interests.

There is another reason which I think is even more important—a broader reason. From the standpoint of the nation's welfare, I feel that members of the medical profession, even where there are issues involved that do not directly concern their profession, should become interested in political campaigns and political affairs.

I say from the standpoint of the nation's welfare for this reason: In a democracy, the character and the quality of our public servants is directly related to the interest and the intelligence of the electorate.

The medical profession is made up—and I can say this, although perhaps a doctor might not in modesty be able to say it—the medical profession is made up of a group which represents one of the highest standards of intelligence in the whole country. For that reason, members of the medical profession, I think, owe a duty not only to themselves and to their profession, but also to the nation at large, to give the nation the benefit of that intelligence in selecting the representation the people will have in the state and national capitals. Because if we can increase the general level of intelligence of the electorate, it means that we are going to increase the character and the quality of those who represent us in Washington.

Let me say also that members of the medical profession, of the legal profession, and of other professions and businesses in this country, should recognize that there are national issues which are acted upon in Washington every day which may be now, or may prove to be in the future, far more important than an issue like compulsory health insurance which seems so vitally important to you because that particular issue happens to affect your profession at this time.

I should like to discuss such an issue at this time. I am going to ask the members of this audience—representative members of the medical profession—to look with me at a great political issue, one which does

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not directly involve this profession, but a great political issue, which I submit to you, vitally affects this profession and all professions, and for that matter all people in the United States, because unless we find a solution to this issue, it isn't going to make much difference whether we find solutions to the other domestic problems which we have.

The Issue of Survival. The issue of which I speak—I will term it here today, for lack of a better word—is the issue of survival. It is a political issue at the moment—a political issue because it is being discussed in what is termed “a great debate” down in the halls of the United States Senate. I think that a description of some of the issues involved in that debate will bring home to you very clearly the proposition that I have attempted to establish here today—that members of the medical profession owe it to themselves, and they owe it to the nation, to stay interested in politics even where the issues involved do not affect their profession directly—stay interested because it is vitally important that we get the very best representation that we possibly can in the United States Congress and in the United States Senate today.

I am going to introduce this issue by referring to an incident which occurred in Washington just a few weeks ago. We will call it the “Incident MacArthur.” The MacArthur incident is one which Washington political analysts have not yet been able to appraise accurately, but I think that some conclusions can be drawn from that incident, and those conclusions will bear directly on the issue that I wish to discuss.

First of all, I think most of you were aware of the fact that when the President recalled General MacArthur, the effect on the Congress was almost catastrophic. Never in the history of the Congress have we seen so many wires, so many letters, so many telephone calls from outraged citizens throughout the country, protesting the action of the President.

I think, however, that as far as that action is concerned, we should recognize that it was not entirely a pro-MacArthur sentiment that was being expressed. I think there were two reasons for the outburst of public indignation.

One of the reasons was obviously pro-MacArthur. In other words, a number of people thought very highly of General MacArthur. They were convinced that he had rendered a great service to his country, and they felt that the President had made a great error in removing him as he did. I think the reason we found so much pro-MacArthur sentiment relates to a certain extent to the character of the man.

Whether you agree with him or disagree with him, I think most of you who heard his address on radio or television before the joint session of the Congress, were convinced that in a time when too few men in political life had courage, character, conviction and

intelligence, that here was a man who stood out from the lot.

I know that those of us who attended the secret Senate Committee sessions at which he testified were impressed by the sheer physical endurance of the man. For eight to nine hours a day, leaving the room only once each day, he was able to sit there and answer the best questions that Administration Senators had been able to prepare.

We could not help being impressed also by the intelligence that he showed—by the fact that during that period of approximately twenty-seven hours on the witness stand—never once did he ask to refer to files or papers before replying to a question. Only a half a dozen times each day did he turn even to his aide who was with him, and get a little briefing on a date or another incident which was necessary to fill out the story.

Then, of course, the skill with which he handled his cross-examiners greatly impressed all who were there.

All in all then we can see why there was a great deal of pro-MacArthur sentiment which reflected itself in objections to the President's action in recalling him.

We also must take into account, however, the fact that the sentiment that was being expressed was Anti-Administration. For months preceding the recall of General MacArthur the public had been reading about the Fullbright Committee's investigations and those of the Kefauver Committee revealing crime and corruption in the Government, and the result was that resentments had piled up. Then this incident came along and it was more or less like a match being lighted to a giant firecracker which had been created.

So the reason for the tremendous outburst was a combination of pro-MacArthur and anti-Administration sentiment.

What were the issues which were involved? There are two which I think are somewhat extraneous. These I will mention briefly, and then the great issue that I wish to discuss at somewhat greater length.

The two that are extraneous are these, and I might say that there is now general basic agreement upon them. First, the President had a right to do what he did. Second, it is generally agreed the President did what he did in the wrong way. But the great issue is not whether the President had a right to do what he did or whether he did it in the wrong way. The great issue is: which policy is best for the United States of America? The policy advocated by General MacArthur, the policy advocated by Secretary Acheson and other Administration supporters, or possibly a policy somewhere in between?

In discussing this question, I think it is essential that we as American citizens appraise past history—appraise it not for the purpose of blaming those who happened to have made mistakes in the past, but to make sure that we don't make those same mistakes in the future.

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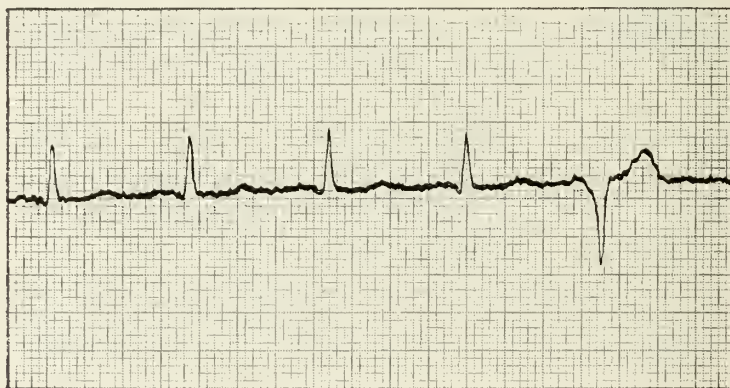
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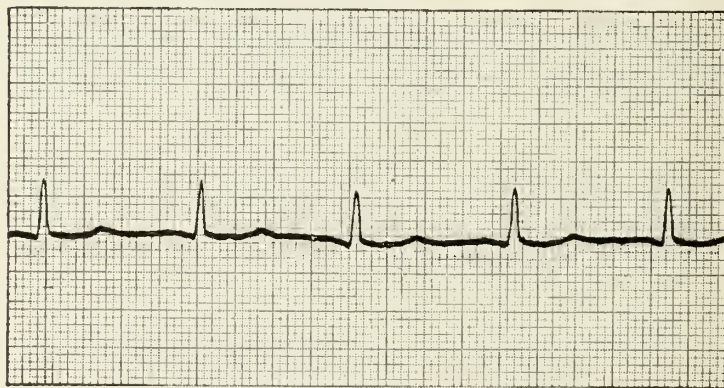
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Orally: 1 Gm. (4 capsules) followed by 0.5-1.0 Gm. (2 to 4 capsules) every four to six hours as indicated. It is important that the drug be given by mouth unless the urgency of the situation makes intravenous administration essential.

Intravenously: 200-1000 mg. (2 to 10 cc.). **CAUTION—ADMINISTER NO MORE THAN 100 MG. (1 CC.) PER MINUTE.**

Hypotension may occur during intravenous use in conscious patients. As a precautionary measure, administer at a rate no greater than 100 mg. (1 cc.) per minute to a total of no more than 1 Gm. Electrocardiographic tracings should be made during injection so that injection may be discontinued when tachycardia is interrupted. Blood pressure recordings should be made frequently during injection. *If marked hypotension occurs, rate of injection should be slowed or stopped.* The patient should remain lying on his back. If the symptoms demand it, cautiously employ measures to raise the blood pressure moderately.

For the treatment of runs of ventricular extrasystoles:

Orally: 0.5 Gm. (2 capsules) every four to six hours as indicated. Where administration is continued for appreciable periods, there should be occasional electrocardiographic checks to determine the need for the drug. Where there is both kidney and liver disease, accumulation of the drug may occur and continued administration may be hazardous.

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Five Year Review. I would like you to go back with me five years for just a moment and see what the situation in the world was. Five years ago, at the conclusion of World War II, the United States was the most powerful nation on the face of the globe. We had a monopoly on the atomic bomb and we were stronger in the air, on the sea, and on the ground, than the Soviets. As far as people in the world were concerned, there were approximately a billion, seven hundred million people on our side—there were only a hundred and eight million people on the Communist side.

Five years have passed. What is the situation today? Today, we no longer have a monopoly on the bomb. Fortunately, we have more bombs than has our only potential enemy. We are no longer stronger on the ground. We are probably equal in the air—stronger above the sea, weaker under the sea. When we analyze the breakdown in people, what do we find? We find today that there are only five hundred and forty million people on the side of the free nations. There are eight hundred million people on the Communist side. There are six hundred million that will have to be classified as neutral, in countries like India and Pakistan.

In other words, to point it up, five years ago at the conclusion of the most costly war in this nation's history, the odds in people in the world were nine to one in our favor. Today, they are five to three against us.

So I submit, in the light of that history, that it is essential for the American people and the American Congress to reappraise their foreign policy, because regardless of all the excuses and all the justifications for that policy, what do we find?

The results are these: In the course of five years, six hundred million people were lost to the cause of

the free nations and came under the domination of the Communist nations. And this has been accomplished without the Russians losing a single soldier in combat.

What does that mean? It means that we must develop new strategy and new techniques to meet the obvious new strategy and new techniques which our only potential enemy has developed. What is their strategy? What are their techniques? I would like to say, in discussing the strategy and the techniques of the Communist conspiracy, that I don't pretend to be an expert in this field, or for that matter, in any other. I have had some experience, however. I was a member of the House Committee on Un-American Activities for four years. I have made it a point to study Marx and Lenin and Stalin. In 1947 I visited Europe and had the opportunity there, not only to talk to the leaders on our side, but I also made it a particular point to talk to the Communist leaders wherever I could, in England, France, Germany, Greece and Italy. On the basis of that experience, I think that certain fundamental conclusions can be drawn as to the character of that conspiracy—conclusions, I feel, on which you will find very little disagreement among students of the subject.

The first great conclusion that we must bear in mind is this, as we develop our policy in this period: The men in the Kremlin are the most realistic men who ever lived. They are men who will never take a chance. As long as they are convinced, because of the strength on our side as against the weakness on their side, that if they begin a war any place in the world, and they run the risk of losing it, they will not begin one. Once they are convinced, however, because of their strength and our weakness, that if they begin a war any place in the world, they might win it, then war will come.

(To be continued)

DEATHS

DANIEL L. MAGUIRE

Dr. Daniel L. Maguire, 68, died in Charleston on October 6. (See Editorial Page for biographical sketch and tribute).

OTIS H. PURVIS

Dr. Otis H. Purvis, 62, died at his home in Cheraw on September 20.

A native of Florence county, Dr. Purvis received his medical degree at the Medical College of S. C. (Class 1911). He opened his office in Effingham and then in 1915 moved to Cheraw where he built up a large general practice. Before illness made him curtail some of his activities several years ago he was one of the most active practitioners in his section of the state. During recent years he served as part time county health officer.

Dr. Purvis is survived by his widow, the former Miss Eunice Anderson of Timmons ville.

NATHAN B. SCHOFIELD

Dr. Nathan B. Schofield, 67, died at a hospital in Florence on September 24.

Born in Pelion, Dr. Schofield received his medical training at the Medical College of S. C. (Class of 1909). Following graduation he opened an office in Marion where he built an extensive general practice. Illness forced his retirement from active practice several years ago. In addition to his medical work Dr. Schofield was particularly interested in Boy Scout activities and received a special award for the work which he did in this field.

Dr. Schofield is survived by his widow, the former Miss Ethel Watson, two daughters, and three sons, one of whom is Dr. John William Schofield of the Knoxville General Hospital.

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NEWS ITEMS

Dr. J. D. Guess, President of our Association, was the guest speaker recently at Daytona Beach.

Dr. George M. Wyatt, Orangeburg Radiologist, exhibited his work in X-ray surveys of the small intestine at the annual meeting of the American Roentgen Ray Society held in Washington this year.

Dr. George R. Dawson, Jr. of Florence, has announced the association of Dr. Howard W. Mahaffey in the practice of orthopedic surgery.

Dr. William H. Bridgers of Columbia has been elected a member of the Neurological Society of America and will be installed at the annual meeting to be held at Sim Valley.

Dr. Leland J. Brannon of Columbia was elected President of the South Carolina Chapter of the American College of Surgeons. Dr. C. R. F. Baker of Sumter was elected Vice President and Dr. Weston Cook of Columbia was re-elected Secretary.

The unveiling of a portrait of the late Dr. W. J. Young was an event at the Allendale Hospital during September. Dr. Young was one of the benefactors of the institution.

The Mental Hygiene Clinic of the Medical College of the State of South Carolina, 267 Calhoun Street, Charleston, S. C. announces a fee system which will be put into operation November 1, 1951.

Fees will be based on ability to pay and the type of service.

The Southern Section of the American Laryngological, Rhinological and Otolological Society will meet in Atlanta at the Academy of Medicine, Monday, January 14, 1952. This will be a one-day meeting, and there will be six speakers, each of whom is pre-eminent in his own field:

Dr. John E. Bordley, Johns Hopkins, THE PROBLEM OF THE PRESCHOOL DEAF CHILD—The Otolologist's Role in Diagnosing His Deafness and Supervising His Rehabilitation.

Dr. Samuel L. Fox, Baltimore, BLEEDING FOLLOWING TONSILLECTOMY.

Dr. V. K. Hart and Dr. William Pitts, (neurosurgeon by invitation), Charlotte, THE DIAGNOSIS AND TREATMENT OF ACUTE SUBDURAL ABSCESS SECONDARY TO FRONTAL SINUSITIS.

Dr. Julius W. McCall, Cleveland, CANCER OF THE LARYNX.

Dr. Harry Rosenwasser, New York, GLOMUS JUGULARIS TUMOR OF THE MIDDLE EAR. (He is the author of the first clinical article on this subject.)

Dr. Joseph A. Sullivan, Toronto, RECENT ADVANCES IN THE TREATMENT OF FACIAL PARALYSIS AND BELL'S Palsy.

All members of the Medical Profession are cordially invited to this meeting. There is no registration fee.

"Urology Award"—The American Urological Association offers an annual award of \$1000.00 (first prize of \$500.00, second prize \$300.00 and third prize

\$200.00) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to men in training to become urologists.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Chalfonte-Haddon Hall, Atlantic City, New Jersey, June 23-26, 1952.

For full particulars write the Secretary, Dr. Charles H. de T. Shivers, Boardwalk National Arcade Building, Atlantic City, New Jersey. Essays must be in his hands before February 15, 1952."

SYMPOSIUM ON EXFOLIATIVE CYTOLOGY, CANCER DETECTION AND DIAGNOSIS

December 9-11, 9-14, 9-21, 1951
Augusta, Ga.

A symposium on exfoliative cytology, cancer detection and diagnosis is announced by Dr. G. Lombard Kelly, President of the Medical College of Georgia.

A concentrated program of teaching on the fundamentals of cancer, cytology and diagnostic procedures is provided. Adequate facilities are offered for microscopical and laboratory practice. A second week is offered for those who wish to devote their time entirely to the study of the ample material available.

The symposium is presented under the direction of Dr. H. E. Nieburgs and staff. In addition to the faculty of the Medical College, the following guest lecturers are scheduled: Dr. L. D. Stoddard, Dr. A. E. Rakoff, Dr. Willis E. Brown, Col. Joe M. Blumberg, Mrs. Ruth M. Graham, Dr. Louis M. Hellman, Dr. J. K. Cline, Dr. W. K. Cuyler, Dr. John E. Dunn, Dr. M. A. Benioff, Dr. Peter A. Herbut, Dr. Ira T. Nathanson, Dr. Paul Wermer and Dr. Ingrid Stergus.
















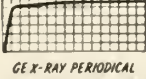


The fifth annual meeting of the Southeastern States Cancer Seminar will be held on November 28, 29, and 30, 1951, in the San Juan Hotel, Orlando, Florida. The faculty will include Drs. Vincent P. Collins, Alfred Gellhorn, Cushman D. Haagensen, Perry B. Hudson, Herbert B. Maier, Joseph J. McDonald, Milton R. Porter, Arthur P. Stout, and Gray H. Twombly, from the staff of the Francis DeLafield Hospital, New York City.

FOWLER LECTURES

On Thursday and Friday, September 20 and 21, the second annual series of the Fowler Lectures was held at Edgewood Sanitarium Foundation, Orangeburg, S. C. The series took the form of a two-day session on alcoholism and drug addiction with three additional lectures being devoted to the subject "Religion and Psychiatry," a timely topic which is fast gaining the attention of the American public. With the deplorable incidence of alcoholism among four million excessive drinkers in this country today, and with the appalling incidence of drug addiction among adults and teenagers, the medical and religious sessions at Edgewood served a far-reaching purpose to those in attendance from three states.

Included on the program of the symposium were such nationally-known authorities as Dr. Harry Isbell, Director of Drug Research, Public Health Service,

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Lexington, Kentucky; Dr. Leon Greenberg, scientist, author and inventor of the aleometer of Yale University, Dr. Francis McPeak, author, minister and Industrial Counselor, Chicago, Illinois; Dr. Raymond McCarthy, author and Director of Educational Activities on the Connecticut Commission on Alcoholism; Dr. Aaron Rutledge, minister, marriage counselor and professor at Furman University and others.

The Fowler Lectures began at 10:00 A. M. each day and featured morning, afternoon and evening addresses, discussion periods and films. Not only physicians, social workers, nurses, psychologists and welfare workers were in attendance from North Carolina,

South Carolina and Georgia, but also educators, clergymen, legislators, judges, youth group leaders, Parent-Teacher members, mental hygiene groups, police forces and the public in general.

No fees were charged for any of the lectures at Edgewood. The informative addresses throughout the two-day session represented another gesture on the part of Edgewood Sanitarium Foundation to offer to the public the best in general medical and psychiatric education. In an effort to carry out the Ten-Point Program of the South Carolina Medical Association, this institution arranges these educational symposia annually as one feature of an extensive educational program.

WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. K. D. Shealy, Columbia, S. C.

Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.

EXCERPTS FROM NATIONAL PROGRAM CHAIRMAN'S TALK AT BOARD MEETING

The National Program Chairman is appointed by the National President. The Program Committee is made up of four regional program chairmen appointed by the National Program Chairman, one from each of the four regions: Southern, Eastern, Western and North Central.

Your national program chairman has not been idle this summer. I met with a national auxiliary committee and a committee from the American Medical Association, in Chicago, in June, in order to plan the program for the current year. After two days of lectures and round table discussions, we were ready to outline a program to serve as a guide for state and county auxiliaries. The basic program outline, suggestions from the program committee and a packet of program material. After this material was formulated and compiled, it had to have the approval of the American Medical Association and the national auxiliary before distribution to the proper persons.

Your national program chairman contributed an article on "Program" for the August issue of the National Bulletin which you received recently. It would be needless to review that article as I am sure all of you take the Bulletin and have read it!

I would suggest that you stress Fellowship in your programs this year. We can do a better job if we know the people with whom we work. Make your programs short and snappy. Allow some time for a social hour. This promotes fellowship and better attendance.

Correlate your work with that of your Medical Society or Association to which you are an auxiliary. In order to do this, I would suggest a study of your Medical Societies. Familiarize yourselves with their activities and map your programs accordingly. Do not wait for them to call on you for assistance—offer your services to them. Make your programs so outstanding that they will demand recognition from the medical profession. Let your doctors know what you are doing for them. Would I dare say that we would be nearer socialized medicine today were it not for the Medical Auxiliaries?

Your National President has suggested that we include Health Days Programs on our program agenda this year and if you feel a need for them in South Carolina I am sure they will be included. Your program chairman will hold a panel discussion on "Health Days" at the Conference in Chicago, in November. Information regarding the program and planning of Health Days will be sent to you upon request.

Do not forget that we are an Auxiliary to a medical group. Last year as state president, it was interesting to note in the reports from the various county auxiliaries that much more work had been done to assist other groups than our own Medical Societies. We have advanced far beyond the first two requests of the American Medical Association to our Auxiliaries: (1) the promotion of "Today's Health" and (2) combating the hazards of medical legislation. Today, we are taking the initiative in many cases.

See that your doctor husband pays his dues to the American Medical Association so that we may become members of the National Auxiliary. We are asked to encourage individual donations to the Medical Education Foundation. I felt very proud as a South Carolinian, while attending the Auxiliary meeting in Chicago, in June, to hear a speaker from the American Medical Association tell of the \$10,000 donation which the Medical Association of the State of South Carolina had made toward the Medical Education Foundation and to set that up as an example to other states of greater size and wealth.

With nearly 60,000 women behind the medical profession, the potential accomplishments are unnumbered.

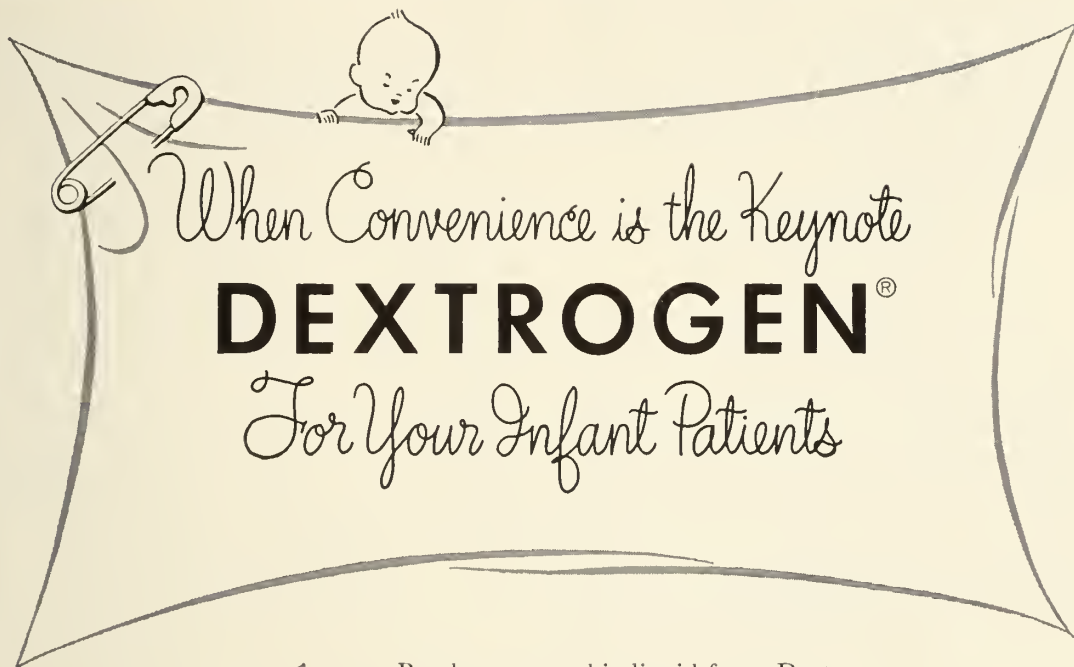
Lets prove to the medical profession that we are standing behind them not only in program but in every undertaking.

Roberta Talbert Burnside
(Mrs. Alfred F. Burnside)
National Program Chairman

The Fall Executive Board meeting of the Woman's Auxiliary to the South Carolina Medical Association met September 27, at the home of Mrs. Kirby D. Shealy. Mrs. Shealy, State President, presided. Board members attended from Orangeburg, Rock Hill, Liberty, Charleston, Walterboro, Abbeville, Newberry, Spartanburg, Greenwood, Greenville, and Columbia.

Mrs. Alfred F. Burnside, National Program Chairman, was the guest speaker at a luncheon held at the Columbia Country Club.

It is my desire to contact every woman's organization in the State, through the County Chairmen. These groups will be urged to express themselves, by adopted resolutions, as to their desires on this matter so vital to each American citizen. Well-qualified speakers will be furnished the interested groups. Effort will be made to have all publications of the A. M. A. put into the hands of Auxiliary members, so that each



Ready to use and in liquid form, Dextrogen is a concentrated infant formula, made from whole milk modified with dextrins, maltose, and dextrose. In addition, it is fortified with iron to compensate for the deficiency of this mineral in milk. Diluted with $1\frac{1}{2}$ parts of boiled water,* it yields a mixture containing proteins, fats and carbohydrates in proportions eminently suited to infant feeding. In this dilution it supplies 20 calories per ounce.



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of us may keep informed on all medical legislation. And, with bona fide facts, we will be able to pass them on to those who do not know these true facts.

Nothing drastic is expected to occur in Congress this year relative to Socialized Medicine. But, your Legislative Chairman will be ready if an emergency should arise.

Respectfully submitted:

Ida H. Owens
Legislative Chairman
Woman's Auxiliary to the South
Carolina Medical Association

News of Auxiliary to the Greenville County Medical Society

Dr. J. Decherd Guess of Greenville, President of the South Carolina Medical Society, at the annual luncheon meeting of the Auxiliary to the Greenville County Medical Society, on October 1 at Hotel Greenville, reemphasized the value of the maternal welfare program, a project inaugurated two years ago embracing the dissemination of information to colored laity, and the need for continuation of the program. He pointed out that the maternal mortality rate has decreased remarkably during the last few years in South Carolina, approaching the national average, but continuing to be much higher than that of many of

the states. (Last year the S. C. rate was approximately 1.6).

Mrs. Kirby D. Shealy, of Columbia, S. C., President of the Auxiliary to the S. C. Medical Association, spoke on the organization of the medical auxiliary. She pointed out concisely the aims and objectives of the organization. She related the impressiveness and magnitude of the meeting of the Auxiliary to the American Medical Association, which she attended in June. The importance of belonging to the Auxiliary demands our attention when we consider that approximately 50% of the eligible women in the state do not belong to the Auxiliary. Membership may be through one of the thirteen county (or district) organizations or may be via "member-at-large" or "associate member" in unorganized areas. Mrs. Shealy suggested a slogan for the Auxiliaries, "Every doctor's wife a member."

Other guests at the meeting included Dr. W. W. Edwards, President, Greenville County Medical Society; Dr. Joe Crosland, President-elect, Greenville County Medical Society; Dr. Joe Converse, Chairman, Advisory Committee; Mrs. Weston Cook, Publicity Chairman, Auxiliary to the South Carolina Medical Society. Approximately 50 auxiliary members were present at the meeting.

Mrs. David A. Wilson, Publicity Chairman
Auxiliary to Greenville County Medical Soc.

CORRESPONDENCE

Dr. Julian P. Price, Editor
Journal of the S. C. Medical Assn.
Florence, South Carolina
Dear Sir:

The purpose of this letter is to acquaint you with the present procedures whereby eligible civilian physicians may request an appointment in the Regular Navy, and to solicit your cooperation in an effort to secure wide publicity of this matter in the State of South Carolina.

Civilian physicians with no present service affiliation and who did not participate in the Army Specialized Training Program (ASTP) desiring commissions in the Regular Navy should apply to the Office of Naval Officer Procurement, Post Office Building, Macon, Georgia.

It is no longer necessary for the young physician completing his internship to be ordered to appear for written professional examination and to await action thereon before appointment may be effected. Those serving in internship may submit their applications within two months of completion date, but appointments will not be issued until they have satisfactorily completed internship.

Your interest and cooperation in this matter are appreciated.

Sincerely,
J. B. LOGUE
Rear Admiral (MC) USN
District Medical Officer

October 6, 1951

Dr. Julian Price
105 W. Cheves Street
Florence, S. C.

We are mailing you, under separate cover, a copy of the cumulative school health record which has been developed by representatives of the State Board of Health and the State Department of Education. There has been much demand for a record of this type. Almost every other State had one, copies of which we reviewed during the development of ours. We know this is not a perfect set-up, and we shall welcome suggestions as to changes before reprints are made.

We should like you to publish an article in the Journal informing the medical profession that these records exist and private physicians may be called upon from time to time to fill in the medical section for private patients. If there is certain information that he wishes to reserve from the school authorities, that is his privilege.

With best wishes and kindest regards.

Sincerely yours,

Hilla Sheriff, M. D., Director
Division of Maternal and Child Health

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R. Charman Carroll, M.D., Diplomate in Psychiatry. — Medical Director.

Robt. L. Craig, M. D., Diplomate in Neurology & Psychiatry, Associate Director.

BIRTHS

Dr. and Mrs. C. K. Lindler of Columbia have announced the birth of a daughter, Charlotte Elizabeth, on August 21.

Dr. and Mrs. H. F. Hall of Columbia are parents of a baby girl, born on August 20.

Dr. and Mrs. George C. Smith of Florence an-

nounce the birth of a son, George Covington Smith, Jr., October 5. The Smiths have four other children—all girls.

Dr. and Mrs. L. V. Jowers of Columbia, announce the birth of a son, Ronald Gregory, on August 27.

Dr. and Mrs. J. G. Jeanes of Lyman have a new member in the family.

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ORIN R. YOST, M. D.

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PSYCHIATRIST-IN-CHIEF

The Journal

of the

South Carolina Medical Association

VOLUME XLVII

December, 1951

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Antepartum Bleeding In The Last Trimester*

HEYWARD H. FOUCHE, M. D.
Columbia, S. C.

In any discussion of antepartum bleeding in the last trimester it will be necessary to review and relash many factors which are and have been known to us for some time. The prime purpose would be to refresh these factors in our minds and to determine any change or trend in the treatment of this common but often formidable complication.

In considering the etiology of antepartum bleeding, I arbitrarily divide it into so-called extrinsic and intrinsic bleeding. In table I are listed the various conditions which I term extrinsic causes.

TABLE I

Bleeding Extrinsic to Uterus

1. Vaginal Varicosities
2. Ulcerative Lesions of Vagina & Cervix
 - a. Chancre
 - b. Chancroid
 - c. Granulomas
 - d. Carcinoma
 - e. Chronic Cervicitis
3. Cervical Polyp

Vaginal varicosities are not uncommon but fortunately do not often rupture spontaneously with consequent vaginal bleeding. Ligation of numerous vaginal varicosities is impractical but rupture of a single varicosity could be controlled with a suture. I recall one case, of another physician's, who had such large and numerous vaginal varicosities that Cesarean Section was done because of danger of multiple ruptures during delivery.

Any ulcerative lesion of the genital tract can cause bleeding, most often of a mild nature but occasionally quite profuse hemorrhage. I will not dwell on these conditions other than to say that, when present, appropriate diagnostic and therapeutic measures should be instituted.

Cervical polyps are not infrequent and present no symptomatology other than bleeding. They can usually

be removed by simple clamping with a forcep and twisting them off.

The important feature of these extrinsic causes is that all can be ruled in or out by simple speculum examination using aseptic technique. The desirability of visualizing the source of bleeding cannot be emphasized too greatly.

TABLE II

Bleeding Intrinsic to Uterus

1. Rupture of Uterus
2. Abnormalities of Placenta such as
 - a. Circumvallate Placenta
 - b. Placenta Succenturiata
 - c. Rupture of Marginal Sinus
3. Vasa Previa
4. Premature Separation of Placenta
5. Placenta Previa (including so-called Low Implantation of the Placenta)

In table II are listed the causes of bleeding arising from within the uterus.

Since rupture of the uterus most often occurs in the lower uterine segment, it would not be unusual to observe some external bleeding. However, the signs and symptoms are predominantly those of bleeding into the peritoneal cavity and the diagnosis would rest primarily upon this. Treatment, of course, would be multiple transfusions and hysterectomy or possibly repair of the ruptured uterine wall in certain circumstances.

Abnormalities of the placenta are rarely diagnosed until after delivery of the placenta. Circumvallate placenta is in reality a marginal premature separation, while rupture of a marginal sinus and succenturiate lobes simulate previa and they are thus treated.

Vasa previa is very unusual and is due to rupture of a velamentous vessel, resulting in exanguination of the fetus. It is most apt to occur during rupture of the membranes at which time the aberrant vessel may be torn. Diagnosis is difficult and is based primarily on profuse vaginal bleeding with no maternal distress but definite fetal distress. In occasional cases recorded

* (Presented at annual session, May 17, 1951)

fetal salvage has been accomplished by immediate Cesarean section.

Premature separation of the placenta is one of the major causes of antepartum bleeding. I believe that many marginal separations are not recognized, although careful inspection of the placenta would reveal the clotted area on the placenta which is often characteristic of this condition. The classical symptomatology consists of severe constant pain, tense and tender or boardlike uterus, and vaginal bleeding. The frequent association of Pre-Eclampsia and Hypertensive-Cardiovascular Disease with premature separation has been noted by many observers, but this does not always occur. The tense and boardlike uterus is associated with only the more severe separations and particularly with concealed hemorrhage. Even with the so-called typical symptoms the diagnosis is not a positive one until placenta previa has been ruled out. Do not be lulled into security by a normal blood pressure reading in a patient with premature separation. A quick check of the urine for albumin may reveal the presence of severe toxemia and make you realize that the patient is in reality in shock.

Treatment of premature separation rests first in treating shock and replacement of blood loss. Delivery of these patients can and should be effected from below in most instances. As soon as the patient has received supportive treatment and is showing response or stability, a vaginal examination is done using aseptic technique and the membranes are ruptured. Crichton¹ has stated that rupture of the membranes increases the bleeding in the uterine cavity. On the other hand, Sexton² states that rupture of the membranes improves the quality of uterine contractions, decreases further separation, and controls bleeding. Fortunately, most of these patients will labor rapidly and deliver following rupture of the membranes. And of course we must consider those patients whose cervixes are totally unfit for induction from below, and those who continue to bleed profusely while making no progress towards delivery. Here Cesarean section must be considered and done when thought indicated. In a review of the antepartum hemorrhage in a 10 year period (1935-1945) at Roper Hospital there were 3 maternal deaths, all 3 having premature separation. Two of these patients were treated by Cesarean section, the other by podalic version. Marked infiltration of blood into the musculature of the uterus may produce a Couvelaire uterus, necessitating a Porro Section. Cesarean section has been advocated on special occasions purely in the interest of fetal salvage. Some authorities believe that both podalic version and the use of pituitrin or pitocin in premature separation is contra-indicated. The infiltration of blood into the myometrium weakens the musculature and renders it more liable to rupture.

Kellogg³ and his associates noticed a definite decreased coagulability of the blood in many cases of premature separation. This has been attributed to a decrease in fibrinogen concentration and prothombin

activity, and the presence of a circulating fibrinolysin. This has been offset by them in administering fibrinogen itself. Fibrinogen is not available to us as yet and we must rely on whole blood transfusions at present. This condition is rapidly corrected without specific measures once the patient has delivered.

A few words should be said about the occasional occurrence of the "erish syndrome" or lower nephron nephrosis with resultant oliguria or anuria. Should this occur, treatment should consist only of replacing insensible fluid loss plus that from the gastrointestinal tract and what little urine may be passed. The type of fluids given would depend on what is needed to correct any electrolyte imbalance. Do not attempt to force the kidneys by diuretics or excessive fluid intake but allow recovery to take place spontaneously when the precipitating factor has been removed.

And last, but certainly not least, placenta previa must be reviewed. It has frequently been said that any bleeding in the last trimester must be considered placenta previa until proven otherwise. Bleeding is typically without pain and may appear as only a slight spotting or may be a profuse hemorrhage. X-ray examination is of distinct value from several standpoints. First the location of the placenta may be established. If the placenta is clearly visualized in the fundus you can frequently rule out placenta previa unless you are dealing with a succenturiate lobe or a multiple pregnancy. Because of an estimated 3-4% incidence of monstrosities,⁴ an x-ray is helpful in establishing the presence or absence of such a condition. Fetal viability is always of importance in determining the line of treatment. X-ray is of distinct value in confirming or refuting a clinical impression. Stallworthy⁵ of Oxford, in an analysis of 170 cases of placenta previa, found on admission that 35 had malpresentation and 20 more had a floating head which did not descend into the pelvis on pressure from above.

The manner of internal examination in these patients is a debatable subject. Adequate blood should be immediately available to counteract any precipitation of fresh hemorrhage by examination. Ideally an operating room should be set up for immediate Cesarean section if necessary. Rectal examination is contra-indicated in the presence of antepartum bleeding as long as the possibility of previa exists. The extent of examination depends upon the stage of gestation. Where there is a known viable infant (37-40 weeks) a complete pelvic examination including palpation through the cervical canal is done. Decision as to manner of delivery is made and treatment instituted. Where there is borderline viability or non-viability, examination may be limited to palpation of the lower uterine segment without entering the cervical canal. If a hospital and immediate transfusions are readily available, a conservative course may be followed. Johnson⁶ says it is unwarranted to state that the first hemorrhage of placenta previa may be fatal,

and unjustifiable to teach that pregnancy should be interrupted whenever placenta previa is diagnosed.

Many lines of treatment for placenta previa have been advocated over a period of years. First and foremost is the replacement of blood loss by whole blood transfusions. The manner of controlling the hemorrhage has, for the most part, narrowed down to two methods.

1. Rupture of the membranes with or without scalp traction and
2. Cesarean section.

I believe all central or complete previas should be delivered by Cesarean section. In many instances of partial or marginal previa, simple rupture of the membranes is sufficient to control hemorrhage and allow labor to proceed normally. If this is not sufficient the road is still open to perform a Cesarean. Scalp traction with a Willett forcep is of most value where rupture of the membranes provides insufficient pressure of the head on the placenta and the fetus is known to be non-viable. I do not like Braxton-Hicks version and extraction because of the high fetal mortality, and the danger of rupture of the friable lower uterine segment. I do not like the use of a Voorheas bag because of the added chance of infection plus the frequent necessity of having to perform version and extraction following the expulsion of the bag.

The use of pituitary products to induce or stimulate labor in placenta previa is considered contraindicated by many observers. Tetanic contractions of the uterus are seen even when the very dilute solutions are used. A tetanic contraction might easily cause rupture of the friable lower uterine segment.

Obviously the state of ripeness of the cervix, parity, etc. will have definite influence upon the decision as whether delivery should be accomplished from above or below. These factors must be considered in the light of the individual case.

The greatest loss of fetal lives in association with placenta previa is listed as prematurity. This fact in itself is a definite argument in favor of conservative

treatment and carrying the patient to known viability whenever possible. The premise that Cesarean section is the best means to insure fetal salvage is a false one. I know that many of you have delivered prematures without giving any anesthesia or analgesia, thus increasing the chances of fetal salvage. I have yet to see a Cesarean section performed without anesthesia. Local infiltration without preoperative sedation for Cesarean has been unsatisfactory in my hands. Spinal anesthesia in a patient bordering on or subject to shock from acute blood loss is to my mind contraindicated. Continuing along the same line of thought, Kellogg,⁷ in a series of 200 previas delivered by Cesarean, found that 15% of the babies, born in apparently good condition, later died of atelectasis or cerebral asphyxia. Thus Cesarean section would seem to be of much more value when the pregnancy is at or near term than when a premature infant is anticipated.

In conclusion, I am aware that I have advocated lines of treatment which can be pursued only where hospitals and blood transfusions are available. To those who do not have the good fortune to be near a hospital and blood bank, I can only say that, were I you, I would if possible send these patients to the nearest community that did have these facilities.

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Medical Aspects Of The Control Of Rabies*

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There are many problems connected with the control of rabies that should be of considerable concern to the medical profession hence, I am briefly outlining certain phases of the problem.

In 1950, over 3,000 people in South Carolina have been provided antirabic treatments, at no cost to the patients, by the State Board of Health. This represents not only a considerable monetary value, but it is indicative of the possibility of serious complications resulting, not from the virus of rabies, but solely from the antirabic treatment.

In addition to the problem of our patients, rabies presents a considerable economic problem to farmers with their livestock, the ordinary household pets such as dogs and cats. In fact, through the loss of many valuable animals, such as dogs, cows, horses and domestic animals, there is much interest by our people in this problem.

* Rabies is an acute infectious disease caused by a filterable virus, affecting warm-blooded animals including man. It is primarily an infection of the canine family, especially dogs. The infection in man is secondary usually to the bite of a rabid dog.

Rabies is a disease of great antiquity and was probably a dreaded disease of animals before the opening of recorded history. Plutarch said that it was observed in mankind by the descendants of Aesculapius. It is reported that the son of Aristaeus died of the disease in the thirteenth century B. C. Aristotle stated in the fourth century B. C. that "dogs suffer from madness which puts them in a state of fury, and all animals which they bite when in this condition becomes also attacked with madness." Celsus, in the first century A. D., was the first to give a good description of the infection in man, using the term hydrophobia. Galen, in the third century A. D. described the disease as follows: "Hydrophobia is a disease that follows the bite of a mad dog and is accompanied by an aversion to drinking liquids, convulsions and hiccoughs. Sometimes maniacal attacks supervene." It was introduced on the North American Continent in the middle of the eighteenth century and has, insidiously, continued to exact its toll from the public health, agricultural economy, and wildlife conservation of the United States.

The epidemiology of rabies is that all warm-blooded animals are susceptible. It is world-wide in distribution. Primarily, rabies is a disease of the canine family (dogs, wolves, foxes, coyotes, hyenas, jackals). These are animals that are fond of fighting and biting; thus rabies is readily disseminated. About ninety per cent

of human rabies arises from a canine source, but occasionally man is infected by cattle, horses, cats, squirrels, vampire bats, etc. We have the example in South Carolina of a rabid fox biting a young boy in the face, the boy dying as a result.

That rabies is a summer disease is a fallacy dating back to the days of the theory that the movement of the planets produced disease. Climate and seasons have no influence on its occurrence. Figures from different parts of the world show there is little variation in the seasonal prevalence of the disease. The last quarter of the year, however, shows fewest cases. There is probably a certain degree of natural resistance to rabies, since only about fifty per cent of dogs and ten per cent of human beings contract the disease when bitten by a rabid animal.

Clinically, the disease in man is not unlike that in animals. Both the dumb and the furious types occur. The incubation period may vary from fourteen to ninety days, according to the location and extent of the wound. In badly lacerated head and face wounds, symptoms may appear in as short a time as ten days after the infliction of the wounds. Many persons bitten by rabid animals escape the disease even without treatment. In the furious form of the disease there is increasing irritability, excitement and frequency of convulsions. The irritability may be so extreme that even the slightest motion brings on a convulsion. Spasm of the laryngeal muscles in efforts to swallow causes a fear of drinking any liquids, from which the disease gets the name, hydrophobia. The patient is usually well oriented between attacks of convulsions until a few hours before death. Patients have an anxious terrified facial expression between convulsions. In the dumb form of rabies there is drowsiness, difficulty in swallowing, and paralysis, particularly of the lower jaw. Once rabies is contracted, the ultimate outcome is death.

Means for the control of rabies have been known for nearly one hundred years. The successful application of control methods has been demonstrated repeatedly in many countries and parts of the world. Education, quarantine of dogs, and mass immunization are keys to the solution of the rabies problem. All three measures are necessary for effective control. Effective control of the dog, particularly the stray dog, with immunization of all dogs, will control the occurrence of the disease in the human. Vaccine for the immunization of animals is of proven value at the present time and gives excellent protection to dogs that are inoculated with sufficient vaccine at intervals of ten to twelve months. The vaccine for animal immunization has been improved over the years and

* (Presented at Annual Session, May 17, Myrtle Beach)

there has been developed an avianized (egg-yolk) vaccine that promises to protect animals much longer than the presently-used killed-virus vaccines. This improved vaccine is being given laboratory and field tests and it is expected that its effectiveness will soon be known. Within the present month, the final determination as to the effectiveness of this vaccine will be made by a series of controlled evaluations. Up to the present as many as 50,000 dogs have been so protected, and the material has been released to competent veterinarians for clinical use and study. Annual immunization of dogs is a difficult procedure with which to get public compliance. The development of a vaccine which will afford protection for a longer period will make the control of rabies in dogs much more effective.

Rabies among our wild animals, particularly the fox, is in some areas of serious consequence and of great importance. It may be true that there is considerable variability in rabies in our wildlife and animals, still there is the possibility of a considerable reservoir of infection to be found in such animals.

The pathological lesion of the disease is the typical so-called Negri body found in the central nervous system. The virus produces an acute infectious encephalomyelitis, and the virus may be found in the saliva, salivary glands, and central nervous system. The organism may be present in the saliva of a dog three to five days before the appearance of symptoms.

The problem that confronts us as doctors is, when should a person be given antirabic treatment and which persons may be advised not to take the treatment?

Rabies can be transmitted from the rabid animal to man only by the direct inoculation of fresh saliva through the skin deep enough to come into contact with nerve tissue. Such inoculation only occurs naturally from wounds or bites made by the teeth of the rabid animal. This is the direct exposure. All other exposures are indirect and should be disregarded.

"As it applies to the management of human exposure to rabies, a rabid animal is defined as one which (1) is proved to be rabid by laboratory methods; (2) is clinically rabid by veterinary diagnosis; (3) disappears after biting and cannot be located subsequently; (4) bites without provocation and is killed before confirmatory brain lesions have had time to develop." It has been determined that the smear examination of brain tissue for the Negri bodies has a 10 per cent error, and it is recommended that, in all cases where the history of a rabid animal and a bite has been recorded, the mouse test be carried out.

For all direct exposures—that is, tooth wounds made by rabid animals as above defined—antirabic vaccine should be administered in amounts prescribed by the laboratory to suit the degree of exposure.

The vaccine also may be indicated for children in contact with a rabid animal but too young to give reliable testimony.

In a recent presentation of this subject, the essayists discussed briefly the possible prophylactic use of hyperimmune rabies serum. This serum has been available experimentally and in selected instances for many years. Recent experimental work employing this protective measure has definitely shown the superiority of hyperimmune serum, especially when combined with a course of vaccine, over the use of vaccine alone, after exposure to peripherally introduced street virus. All of these remarks are based on the use of highly potent hyperimmune serum. In case of severe face wounds or deep and multiple lacerations about the hands, the vaccine treatment should be supplemented by the hyperimmune serum. This is especially true when a short incubation time does not allow a sufficiently long period for the development of active immunity. It has been estimated that it takes three weeks for the development of such immunity with the ordinary vaccine, however, when the combination of hyperimmune serum and vaccine are used, much protective value can be assured and thus offer the best promise in preventing rabies after severe exposure. Not to overemphasize your attention on this problem, it should still be stressed that much valuable time can be gained and it is suggested that this procedure always be undertaken in severe lacerations, probably about the face.

It is not believed from a scientific viewpoint that, at this time, this use is all that is needed to prevent rabies, but rather that the use is of such definite value as to the slowing down of the virus and perhaps offsetting some of the toxins that unquestionably it is of great value.

Proper consideration should be given to the indiscriminate use of anti-rabic serum because, while the protective value of the serum is unquestioned and should be used without hesitation, however, there are some pertinent statements that we believe should be made. First-aid precautions, as to all animal bites, should be instituted for everyone in the family even before the physician's arrival. It has been suggested that animal bites be washed immediately and thoroughly for fifteen or twenty minutes with a strong, warm soap solution. This, of course, refers to all animal bites and is merely first-aid precaution and, of course, is of definite and particular value in any type of laceration, regardless of its cause.

In order that we may have before us the question of reactions that occur by reason of the anti-rabic serum, the physician should always bear in mind that occasionally these reactions may follow its use and, in some instances, the reactions are very severe. Probably, the most important type of such reactions is vaccine paralysis which, while rare, is often serious and sometimes fatal. We believe that vaccine should not be used for indirect exposure or under such circumstances as:

1. Contact of saliva with the unbroken skin anywhere on the body, including face or mouth.

2. Contact of saliva with preexistent wound already scabbed over.
3. For tooth wounds through clothing which is not torn.
4. Handling or petting the suspected animal but not bitten.
5. Handling objects contaminated with saliva.
6. Drinking the milk of rabid cows or goats.
7. If the biting animal is still alive and normal one week after biting.
8. Merely to satisfy the anxiety of parents or family but otherwise not indicated.
9. For persons previously treated, the vaccine re-treatment, if used at all, should be limited to not more than six doses.

Not all situations of human exposure will fall in the categories as herein outlined; nor will the physician be able to cope successfully with every case of anxiety complex. But he should bear in mind constantly that antirabic vaccine of itself can cause serious complications and, therefore, that it should not be used unnecessarily.

A statement should be made as to control programs, hence, I quote from the committee of the World Health Organization as to certain recommendations. "The committee recommends that the following specific measures be applied in affected regions:

1. Registration, licensing and taxation of dogs.
2. Elimination of stray animals.
3. Restraint of dogs while the control campaign is under way.
4. Mass vaccination of dogs.
5. Provision of adequate facilities for diagnosis.
6. Reduction in number of wildlife species where these are a reservoir of the disease.
7. A continual and energetic publicity campaign.

We have discussed the protective value of vaccine for rabid animal bites, and also the value of supplemental treatment by hyperimmune serum. We have also outlined certain conditions where the vaccine should not be used, such as indirect exposure and have provided a statement as to certain methods for the control of stray dogs. I wish to call attention to the patient who has taken the full vaccine treatment and has been rebitten. It is believed that if three months or less have elapsed since completion of the vaccine, no further treatment is necessary. If three to six months have elapsed, two or three weekly doses should be used for a booster effect to the original vaccine. Over six months after a treatment, an entire series of vaccine should be used.

Dog-catchers, who can handle rabid animals, are available in most of the large cities and in some counties. They are specially trained and can handle any type of dog without danger to themselves. It should be stressed that, in the destruction of animals, the heads should not be injured, such as by gunfire.

The head is where we get specimens of the brain to determine whether the animal is rabid. In the care of the heads, it should be stressed that they are being sent to the laboratory for special consideration and the brain tissue must not deteriorate. Every head that is to be examined should be carefully iced or frozen and sent to the laboratory as soon as possible after the destruction of the animal.

It is believed that, in every case of rabies in an animal, such animal will die within a short period of time, certainly within ten days. This animal should be carefully confined, for even if he is sick with something other than rabies and disappears, perhaps is killed, the only thing to do is treat all persons who have been bitten by such animal.

We, in South Carolina, are largely guided by a State law which provides for the carrying out of these recommendations and, on a State-wide basis, we believe that considerable progress will be made in our control programs.

In our State law, the statements are made that, if an animal is attacked by a rabid animal and no previous inoculation has been provided, such bitten animal shall be carefully confined for a period of six months. However, if such bitten animal has been properly vaccinated within the previous twelve months period, he shall be confined for a period of only three months.

The care of valuable dogs, which have been bitten by a known rabid animal, has been much discussed by doctors of veterinary medicine, and it seems to be a reasonable conclusion that all such animals should be inoculated or treated by intraperitoneal injections of 10 c. c. to 20 c. c. of vaccine. It is to be noted that this is two to three times the original preventive inoculation. The dose should be repeated over the second day until four or five such treatments have been carried out. This is subject to controversy, but is given here as some evidence of the present-day thinking. Again it is stressed that it is essential that a dog suspected of rabies be confined in order to conform to the above statements.

Judging from statements and questions, it seems possible that many, some even of the profession, still believe that a person may have rabies many months, or years, after being bitten. This is not true. We believe that ninety days is the maximum time in which rabies may develop.

This paper would not be complete unless it said something further about the development and use in humans of avianized virus vaccine. This vaccine contains active virus, modified and attenuated by passage in developing chick embryos. It is followed by no undesirable reaction, whether used in humans or in dogs. It is non-mammalian in origin, hence its use in humans is safe from the chance of the many serious complications which are produced in some cases when mammalian brain tissue is used in the vaccine.

This presentation was begun by stressing the

importance of the problem of rabies, and I wish to end by stating that the S. C. State Board of Health Laboratory, in an average year, receives 657 heads of supposedly rabid animals. Careful examination of the brain tissue of these animals, excluding the mouse inoculation test, has resulted in 49.6 per cent of positive findings.

In this paper, we have outlined the problems that confront the physician in case a patient has been bitten by a dog. We have attempted to outline certain values as to the patient and the treatment, and have also discussed the care of the dog as to further protection

to other humans as well as animals. We trust it will be of some value.

BIBLIOGRAPHY—The material for this presentation came from many sources and from our own records and observations. Pertinent statements from our practicing physicians have also been of great value. Among the sources included, should be mentioned the World Health Organization pamphlets, the Bulletins of the Communicable Disease Center of the Public Health Service and, of particular interest, the special studies made by Dr. Thomas Sellers, State Health Officer of Georgia. Much of the material used in this paper was also presented in a previous address before the Tri-State Medical Association of the Carolinas.

Hospital Facilities For The Premature Infant In South Carolina

J. I. WARING, M. D., Charleston, S. C.

There is rather complete agreement on the fact that the survival of premature infants depends very largely on proper hospital facilities, proper nursing, and prevention of infection and chilling. To secure these very necessary adjuncts to medical care, hospitals and hospital staffs should make every effort to stress their importance and implore their establishment.

Prematurity is still the greatest cause of our infant mortality, and a great part of any effort to reduce mortality will lie in improving hospital care for the premature infant.

In order to obtain a picture of available facilities for care of newborns in general and prematures in particular, through the kindness of the Division of Maternal and Child Health of the State Board of Health, a survey by written questionnaire was made of those hospitals of the state which care for newborn infants. Thirty-two replies were returned sufficiently complete to allow tabulation and to get an overall picture of nursery care. The hospitals replying were:

Abbeville County Memorial
Aiken County
Anderson County Memorial
Beaufort County
Berkeley County
Baker Memorial, (Charleston)
Hospital & Training School for Nurses, (Charleston)
St. Francis Xavier Infirmary, (Charleston)
Roper Hospital
Cherokee County
Pryor, (Chester County)
Colleton County
Dorchester County
Whitehead Infirmary
McLeod Infirmary
Dr. McClaren's Office (Greenville)
St. Francis, (Greenville)
Greenville General
Coleman, (Greenville County)
Wood Memorial Clinic, (Greenville County)
Gaston, (Greenville County)

Brewer, (Greenwood)
Greenwood County
Ridgeland, (Jasper County)
Camden, (Kershaw County)
Marion Sims Memorial, (Lancaster)
Laurens County
Mullins
Marlboro County General
Newberry County
Tri-County, (Orangeburg)
Providence, (Columbia)
Columbia Hospital
Spartanburg General
Tuomey, (Sumter)
Kelley Memorial, (Kingstree)
Divine Savior, (York)
Mary Black, (Spartanburg)

Tabulation was done in September 1949, and no doubt some improvements have been made, but the general situation is essentially the same. The questions were selected in such a way as to emphasize the features of care which are recognized generally as desirable or essential. In order to point out our deficiencies, the replies have been tabulated in percentages of hospitals NOT providing the indicated services. The questions are abbreviated as follows:

Questions:	Facility lacking
Physician responsible for standards of care	47%
"Chief" physician for nursery service	60%
Pediatrician as chief physician	72%
Morbidity and mortality reviewed by staff	38%
Resident physician on call day and night	56%
One nurse to no more than 12 infants	9%
Nursery staff supervised by specially trained graduate	50%
Nursery staff assigned entirely to newborns	60%
Specially trained graduate nurse available night and day	60%
Auxiliary workers assigned to non-professional duties	16%
Auxiliary workers caring for newborns specially	

instructed	56%	supply for each infant	44%
Training of workers by nurse	63%	Formulas tested bacteriologically once a week	91%
Duties of workers clearly defined	31%	Formulas cool at room temp. 2 hours after sterilization	47%
<i>Nurseries</i>			
Nursery provides 24 square feet of floor per infant	50%	Formulas then refrigerated at 45° to 50° F.	6%
Cubicles used	66%	Hands scrubbed before handling bottles	16%
Nursery limited to 12 bassinets	38%	Feeding nurse wears mask and scrubs	25%
Nursery not communicating with other nursery	9%	Nurse prohibited from changing nipples or holes	44%
Suspect nurseries not used for diagnosed infections	56%	Nurse scrubs after diapering baby before giving feeding	56%
Separate nursery for prematures	81%	<i>Special Protection from Infection</i>	
Isolation space remote from nursery for		Infants born outside hospital not admitted, except	
a ill infants	13%	after 1 week of isolation	9%
b readmitted infants	16%	Newborns not allowed in room with sick children	13%
c outside cases admitted	16%	Nurses handling infected patients do not handle newborns	6%
Suspect nursery available	53%	Newborns of mothers with diarrhea or respiratory disease excluded from nursery	31%
Ritual circumcision done elsewhere than in nursery	18%	Such newborns removed from nursery promptly	28%
Bassinets 18 inches apart	28%	Nursing care at bedside	34%
Suspect bassinet for each 12 in nursery	50%	Scales freshly covered for each infant	0
Suspect nursery completely separated	40%	Common bathing tables prohibited	66%
<i>Walls, Ceilings, and Floors</i>			
Nonabsorbent, washable material	13%	Common dressing tables prohibited	66%
<i>Furnishings and Equipment</i>			
Individual equipment for each infant, except scales	34%	Physicians and nurses wash hands before and after handling infant	22%
Use of multiple carriers for babies prohibited	50%	Diarrheal suspects removed at once	9%
Handwashing facilities in each nursery	13%	Diarrhea of the newborn isolated	6%
Automatic control of water (knee, elbow, foot)	56%	Nursery workers wear gowns	25%
Disposable towels used	9%	Nursery workers wear caps	44%
Metal sanitary can for diapers	9%	Nursery workers wear masks	19%
Separate hamper for other linen	9%	Laundry from suspect and isolation nursery autoclaved	40%
<i>Accessory Rooms and their Use</i>			
Bottles covered with caps or paper bag	6%	Linen for premature nursery autoclaved	50%
Terminal sterilization used	75%	Visitors excluded from nursery	0
Temp. of formula not less than 200° F. at end of heating	72%	<i>Feeding</i>	
Caps left on bottle until feeding time	19%	Bottles are held, not propped	19%
Bulk storage of formula prohibited	34%	Mother washes hands before nursing	38%
Water given to infants sterile	0	Individual breast preparation trays	34%
Anteroom with lavatory and desk	63%	Baby lies on clean towel during nursing	60%
Treatments and examination in bassinets	25%	All visitors excluded during nursing	19%
Separate room for preparing formulae	53%	<i>Cleaning Nursery Unit</i>	
Milk room where contamination is minimized	25%	Dry dusting or cleaning prohibited	22%
Milk room supervised by dietician or nurse	0	Maids wear caps, masks, gowns	25%
Milk room has refrigerator	19%	<i>Care of Soiled Linen</i>	
Milk room has sink	19%	Hampers put outside nursery so that collector need not enter	6%
Milk room has lavatory	56%	<i>Records</i>	
Milk room has sterilizer	31%	Separate clinical record for the infant	3%
Milk room has cupboard	16%	Complete daily records kept	9%
Milk room has worktable	13%	The results have been expressed in terms of deficiency rather than of accomplishment in order to stress the defects in our present facilities. Many of the older physical arrangements can be improved only with difficulty, but techniques can certainly be readily improved. New construction will improve the picture, and regulations for hospital licensing will help, but they may not be detailed enough to cover all of our specific needs. Improvement will depend largely on the interest of hospital staffs. The picture now is not a desirable one. No doubt, it reflects some reason for our high neonatal mortality, especially in respect to premature infants.	
Bottles, caps, nipples, rinsed after use	13%		
Bottles, caps, nipples, washed with hot suds or mechanical unit	6%		
Nipples inverted in the process	13%		
Bottles rinsed and sterilized before filling	6%		
Bottles kept in sterile area after sterilizing	9%		
Nipples rinsed and sterilized before attachment	6%		
Three-minute scrub by worker before making formula	28%		
Utensils washed and sterilized	3%		
Formula ingredients in sterile containers	3%		
Formula put in racks and labelled, for 24 hours			

"What Do You Get For Your \$25?"

W. W. BAUER, M. D.
Chicago, Ill.

(The following address was delivered by Dr. W. W. Bauer, director of the A.M.A. Bureau of Health Education, at the recent annual meeting of the Medical Society of the State of Pennsylvania in Pittsburgh. We are reproducing it here since the facts are of interest to every member of the A.M.A.)

When you send that check to your local medical society, including state dues and, more recently, A.M.A. dues, the thought may flash across your mind—what am I getting out of this? The immediate and obvious answers are that you are getting status as a reputable physician accepted by your professional colleagues plus recognition of your right to mingle with them professionally and participate in their discussions and work with them for common objectives. You are getting a place in a great team of almost 150,000 members dedicated to "the advancement of the science and art of medicine and the betterment of the public health."

That little membership card entitles you also to a great many other services, some direct, many indirect. Some years ago the late Dr. Rock Sleyster, president of the A.M.A., characterized the Association headquarters as an ammunition factory where products are developed for use on the battle lines. Some of these products are as tangible as a pamphlet and others, equally important, as intangible as an attitude.

You are all well acquainted with the routine membership privileges such as attendance at meetings with participation, eligibility for committees and offices, and the right to be heard in any meeting of physicians. I will spend no time dwelling on these but proceed at once to some of the services available to you of which you must be unaware, because you utilize them so seldom.

The Judicial Council furnishes a court of last resort to decide ethical questions under the general policies laid down by the House of Delegates, thus giving the individual physician the strength inherent in group support for his ethical standards which are often at variance with the ideas of less altruistic individuals.

The evaluation of new drug products through the Council on Pharmacy and Chemistry is a service which affects every practicing physician. He can make direct use of it by using and encouraging the use of accepted products, but whether he does so or not, the whole level of production and introduction of new drugs is raised by the very existence of the Council and the knowledge among manufacturers that whatever new drug product they offer to the profession will be closely scrutinized and evaluated without fear or favor. In like manner the Council on Foods and Nutrition tends to improve the quality and regulate the claims for

foods having medicinal significance, while the Council on Physical Medicine and Rehabilitation performs a similar function in its field.

The evaluation of medical schools and hospitals through the Council on Medical Education and Hospitals is known to every physician. So is the work of the Bureau of Legal Medicine and Legislation, whose name defines its functions and whose reports in the JOURNAL and subsequent assembling in volumes of reports and decisions have served physicians for many years. Well known also is the Council on Scientific Assembly and the closely related Committee on the Scientific Exhibit through which the world's greatest medical meetings are made available to physicians twice a year, once in the form of the Annual Session, and once on a more regional basis through the Clinical Session, held in midwinter. Of course, the JOURNAL of the American Medical Association and the nine specialty journals require no introduction to the doctor. When he considers his \$25 investment, the JOURNAL or his alternate choice of one of the special journals would in itself fully compensate him, considering the prices of other publications and the intrinsic value of his own organizational press. Everything over and above these can be regarded as extra dividends.

If your state medical journal is a member of the State Journal Advertising Bureau, you get consultation and sales service on advertising contracts which have made possible large increases in revenue and savings in sales costs, and have opened the pages of state journals to advertising which might otherwise not have been available.

Dr. Olin West once related the story of a doctor who came into his office to complain about the increase of A.M.A. fellowship dues from \$6 to \$8. Doctor West, who had known his visitor for many years, listened to his complaint and then engaged him in casual conversation and finally asked him how his golf game was. The doctor admitted that it was excellent and then Doctor West asked him where he played, whereupon he named three or four golf clubs in the Chicago area. Doctor West commented that this must be rather expensive to which the doctor replied that his total dues did not exceed a few hundred dollars a year. Doctor West then reverted gently to the original topic and source of complaint, a \$2 increase in fellowship dues.

In these days of high and spiraling prices, the A.M.A. must buy materials and services in a rising market. Printing materials and office supplies are increasingly expensive and so are labor and clerical costs and travel. It is necessary in such a situation

either to curtail services or to meet the cost by developing increased income. The A.M.A. has nothing to sell to the public and therefore cannot increase commodity prices. Its only source of income is the advertising revenue of its publications and the dues of its members. The Association has taken special pride in its independence of government funds, foundation grants, and other income whose acceptance might impair the complete freedom of the Association to determine its policy and voice its opinions. The profession must pay a price for these privileges because, paradoxically enough, freedom is not without price.

To return to the recital of services which are tendered you with your membership card, may I refer to the Council on Medical Service through whose studies, meetings, and liaison activities great progress has been made in making better medical service available to more people at prices which they can afford through hospital, surgical and medical insurance, the establishment of grievance committees and emergency call services, community health councils, and in many other ways. The medical profession can have no better advantage than the public good will accruing from its services to patients, not only in individual practice but through organized medicine. In a similar way, the Council on Industrial Health has not only helped to promote health and safety in industry but has improved relationships among employers, physicians and workers to the mutual benefit of all. So has the Committee on Rural Health, the Committee on Emergency Medical Service in the event of war or disaster, and the Commission on Chronic Illness in which the Association is one of four major participants. Each of these in its own field renders a service to every individual doctor when it serves the people and enhances the value and the prestige of the medical profession as a whole.

The Bureau of Investigation, one of the oldest A.M.A. departments, beginning before the turn of the century as a column in the JOURNAL entitled "Propaganda for Reform," continues its unceasing war on quackery and frauds, though its task has been lessened by the heightened activities of the Post Office Department, the Food and Drug Administration and the Federal Trade Commission in these areas. No small measure of this government activity is attributable to the influence of the medical profession. The Bureau of Medical Economic Research has combated another kind of quackery practiced by the distorters of statistics and the misusers of facts and has, in addition, contributed much constructive statistical research, establishing such new concepts as medical service areas supplanting the old county unit system, and pointing out that medical costs have risen less than general living costs and that medical efficiency is not measured by number of doctors but how much and how well doctors can serve their patients; these are but a few of the contributions of this Bureau. It has also established the growing importance of accidents in mortality and morbidity.

Hidden away in a corner, although a corner of sizable proportions now, is a little-known department, the Chemical Laboratory, upon which the scientific councils of the Association lean heavily in the evaluation of drugs and foods.

The library of the Association, with its periodical lending and clipping service and the book reviews and abstracts in the JOURNAL, is well known to most physicians. This in itself is a service for which commercial organizations collect far greater fees than the \$25 which the doctor pays per year for the privilege of calling upon the resources provided by the A.M.A.

Another part of what you get for your \$25 is the Washington Office which has maintained in the capital city a dignified, informative channel of contact with our national legislators which they have appreciated increasingly in the few years this office has existed. Much of the information about pending legislation affecting the public health and the practice of medicine would reach the medical profession too late or not at all if it were not for the Washington Office.

In every war situation the medical profession, despite adverse publicity, has always fulfilled its obligations to the nation. At the present time the Council on Emergency Medical Service is performing a patriotic duty in procurement of medical officers for the armed forces and at the same time maintaining adequate service to the civilian population and protecting the legitimate interests of doctors.

In the field of public relations everyone knows of the determined educational campaign conducted by the Association to ward off the threat of governmental control in medicine. Much less publicized are the public relations values of the continuing services rendered by the Association. Any and all of the activities already enumerated have inevitable repercussions of a favorable nature upon the public attitude toward the medical profession. Health education is so closely related to public relations that the line of demarcation is often very hazy and only the close cooperation which exists between the Department of Public Relations and the Bureau of Health Education prevents duplication, over-lapping, and unwholesome competition. The Public Relations Department handles press and magazine relationships. Network and transcribed radio and television have been assigned to the Bureau of Health Education as well as convention coverage in this field for the Annual and Clinical Sessions. The Public Relations Department sometimes handles radio and television in connection with the meetings held by various bureaus and councils such as the Annual Congress on Medical Education and Licensure, the Congress on Industrial Health, the meetings of the Rural Health Committee, etc. The electrically transcribed health programs of the Association have a very definite accessory value in public relations, covering, as they do, 80 per cent of the nation's heavily populated areas with 11,000 annual broadcasts in which 300 to 600 of the country's 800 AM radio stations participate. So

also do the occasional documentary network programs. The Question and Answer correspondence with lay readers extends direct personal service to 15,000 inquirers a year.

Committee work and advisory services extended by many departments to governmental agencies, voluntary health agencies, cooperating professional groups, educators, business men's and women's organizations, labor unions, and religious organizations all have a two-fold value: they give needed help which can come only from medical sources, and they make friends for the medical profession in ways difficult to measure, but no less real for all that.

The phase of committee, conference, and workshop service with which I am most familiar is that rendered by the Bureau of Health Education through our medical and educational consultants in school health work. Meeting with national and state level groups of doctors, educators, and public health workers and through national conferences on physicians and schools, these consultants offer a two-way channel of communication between doctors and educators, locating and smoothing points of friction, interpreting professional viewpoints, and cooperatively integrating interprofessional activities. This work grew out of one of the earliest of the Association's liaison committees, the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. Through these contacts it has been possible for me to serve twice on a year-book commission of the American Association of School Administrators, the first time in 1940-1942, to originate the year-book, "Health in Schools," and the second time, this year and last, to revise that same book. "Health in Schools" is among the most widely distributed and popular publications of the National Education Association. It contains nothing that is not in full accord with accepted medical principles. Its companion volume, "Health Education," first published in 1925 and in its fourth edition in 1948, occupies a similar commanding position. A third volume devoted to school health services as distinguished from

health education is in preparation. Pamphlets such as "Suggested School Health Policies," "Health Appraisal of School Children" and others have been influential in establishing policies and procedures in relation to school health which improved the health of our children without impairing the family doctor relationships which we know to be fundamental to good medical care.

Unique in the publication field is TODAY'S HEALTH, the lay magazine sponsored by the medical profession. It has been copied by closely similar publications in England, Germany and Canada; an Australian edition has been proposed; it is the most widely quoted health magazine in the world. It offers a channel for health education and legitimate public relations which is not equaled anywhere because it reaches directly a conservatively estimated two million readers monthly, not counting uncounted and uncountable secondary readers who see it in libraries, in schools, and elsewhere.

This is what you get for your \$25—but wait. I should say, this is what you might get for your \$25 if you only would. How many times have you traveled to Chicago without visiting A.M.A. headquarters in which you have so heavy an investment of interest and money? How often have you referred a knotty problem in school health, in medical service, in medical economics or in the numerous scientific fields to the agency established by your representatives and financed by you? Have you supported by word of mouth the radio platter programs placed all over your state by your state medical society? Do you put TODAY'S HEALTH to work in your office in schools, libraries and among your friends? On the basis of roughly twenty-five major activities at or closely related to A.M.A. headquarters they cost you each less than one dollar per year for direct services and for indirect benefits which can hardly be measured or evaluated.

If you don't get \$25 worth for your membership check it may be due in part to the fact that you have never fully exercised your membership privileges. The resources are there. They wait only to be tapped.

A Brighter Outlook For America's Cerebral Palsied*

DR. CHARLES F. MCKHANN, Acting Medical Director
United Cerebral Palsy

We have witnessed during this meeting the dedication of the Chestnut Hill Center for Cerebral Palsy—the first of a series of centers sponsored by United Cerebral Palsy Associations to be devoted to clinical research, training of personnel, testing of new methods for the diagnosis and treatment of cerebral palsy. This is a pilot operation from which should come a stream of trained personnel available to the clinics throughout the country, a flow of tested methods to be applied in these clinics, and an appraisal of new techniques, new procedures and new drugs for the treatment of Cerebral Palsy. Mr. Goldenson has announced that \$2,100,000 was raised by UCPA in their campaigns this past year. These are great accomplishments, but we must look not only at what we have done, but realistically at what needs to be done.

In the United States alone some 550,000 persons are known to have had cerebral palsy since birth, while untold numbers exist of whom we have no record. Additional thousands, including many adults, acquire this disorder as a result of injury or disease.

The great causes of death among infants and children have been or are being rapidly conquered and few indeed are the infants and children born today who need die in early life. It is obvious that more and more attention needs to be devoted to the incapacitating rather than killing diseases, so that children may grow up to be strong healthy citizens, mentally and psychologically normal and not handicapped by physical ailments. Many handicapped children now grow up to fall easy prey to degenerative diseases of later life or are often not able physically to assume responsibility in society or cannot adjust psychologically to their handicaps.

Among the largest groups of children with incapacitating disorders are those with Cerebral Palsy, sometimes in association with convulsive disorders and mental retardation. A very conservative estimate would be at least one in each 150 children has an incapacitating neurologic handicap consisting of cerebral palsy, singly or in combination with a convulsive disorder or mental retardation.

Thus, in a year in which three million babies are born in the United States, from 15 to 22,000 would have such a handicap. With additions to the group from postnatal injuries and illnesses, a quarter of a million children under 10 years, a half a million under 20 years, have cerebral palsy alone or cerebral palsy with retardation.

Can we with the resources available make these patients, especially the children, into useful citizens?

*(Delivered at Annual Convention, United Cerebral Palsy, Philadelphia, Nov. 3, 1951)

While our achievements in the past year have been great they are not enough.

It is only with increasing interest among the medical and allied professions in the problems of handicapped children that progress will come—first in a better understanding of the disorders—later in development of better methods of prevention and treatment.

CAN CEREBRAL PALSY BE PREVENTED?

Our second Research Symposium held the first day of this meeting deals especially with this subject.

Very few cases of cerebral palsy are due to hereditary causes. This is fortunate since hereditary defects in the brain *cannot* with our present knowledge be *prevented*.

While there can be no doubt that adverse conditions of oxygen supply, nutriment, infection in the mother may injure the developing brain of the unborn infant, the proportion of injuries due to these things in relation to the total number of defects due to other causes is small. Furthermore we *do not* at this time *know how to prevent developmental defects*.

Injury to the fully formed brain may occur before birth, but numerically the largest groups of handicaps in children, are due to injury or anoxia during the birth process. *This is important because here much can be done in prevention*. Indeed the work of many investigators indicates that *birth injuries* are singularly the second most important cause of mental defect and probably the *first cause of cerebral palsy*.

The contribution of Rh incompatibility between mother and child has recently come into prominence as a cause of mental retardation and cerebral palsy in infants. Despite our best efforts in treatment many of these infants suffer severe and permanent damage to the brain.

Postnatal accidents, injuries or infections contribute a sizeable number of cases of cerebral palsy. Of all of these causes only *injury at birth and postnatal factors* are controllable in other than the exceptional case.

Thus any sizable reduction in the incidence of cerebral palsy must be obtained by the attack on these two factors—birth injury and postnatal injury and infection.

But while attempts are being made to prevent cerebral palsy, thus diminishing the numbers of these patients, what of the child already here? Is the palsied child denied access to facilities that might offer him a reasonable possibility of developing into a useful citizen? Are the existing facilities for the treatment of cerebral palsy satisfactory?

CAN CEREBRAL PALSY BE CURED?

Cerebral palsy *cannot be cured*. But the vast majority of patients could be educated and trained to useful lives, IF centers and personnel were available to give to each child the benefit of known and established methods of treatment.

Additional facilities for treatment and habilitation of these patients are urgently needed. The majority of children with this disorder do not have access to present facilities.

The treatment must not only improve the physical condition of the child, but must enable him to adjust emotionally to his handicap—it must aid the family in acceptance of the child's condition and must educate the community to recognize and utilize the capabilities of the patient. Many families are not aware of just what can be done for their child and the community often rejects a potentially useful person. For the adult with cerebral palsy—and there are many adult patients—often new patients as a result of head injuries—vocational readjustment is a major problem.

However, even with the best of treatment more could be done for the CP, IF more knowledge were available concerning causation, prevention, early recognition and treatment,—and better techniques were developed for speech, physical and occupational therapy—*goals attainable through research*.

Hence the needs in the field of Cerebral Palsy fall into two groups:

1. To make available to each patient the benefits of existing knowledge and techniques of treatment. This is a *primary aim* on a national scale of UCPA. For each patient rendered a useful citizen there will accrue a tremendous benefit to the patient, to his family and to the community.
2. But the problems of Cerebral Palsy cannot be solved by present methods alone. The disorder must be prevented wherever possible and better methods must be found of treating the affected child or adult. To achieve these ends research and more research is necessary. Scientists throughout the country are being recruited by UCPA in the fields of Neurology, Pharmacology, Physiology, Pediatrics, Orthopedics, Psychiatry

and other branches of medicine, as well as in the fields of Education, Physio Therapy, Occupational Therapy and Speech Therapy to attack the problem. All of these branches of science have taken cognizance of the problem of Cerebral Palsy. UCPA has aided this program by grants to support research in outstanding institutions, such as The Children's Medical Center of Boston, Harvard Medical School, Neurological Institute in New York, University of Utah, University of Illinois, St. Christopher's Hospital for Children in Philadelphia, and the University of California, as well as others.

Although the outlook for cerebral palsy is in many ways good, as a result of research, it must become better.

We must treat today the best we know how,—with the hope that tomorrow we shall have the prevention and cure.

To make available to each patient the benefits of existing methods of treatment becomes a community responsibility and can best be carried out through the local cerebral palsy clinics. Each affected child in the community should be discovered and enrolled in a cerebral palsy clinic.

But the development of better methods, the research that will result in diminution of the number of cases or improve the outlook for the existing case cannot be achieved by local effort.

New knowledge and information must be sought through support by each of the local organizations of the UNITED effort on a national scale.

The care of the individual patient in the application of present methods is the responsibility of the Community, but only by a UNITED effort with support derived from all of the communities can the hope of more effective treatments and cure be achieved. With such support from each local group, the development of new methods will be achieved and will come back to the contributing groups constantly to improve the outlook of the patient—a UNITED effort of UNITED CEREBRAL PALSY ASSOCIATIONS.

CANCER

Edited by HENRY W. MAYO, JR., M.D., Charleston, S. C.

EPIDERMOID CARCINOMA OF THE CERVIX

A Statistical Study

JAMES L. SIMPSON, M. D., LAWRENCE L. HESTER, M. D. AND JAMES M. WILSON, M. D.

This is a study of the cases of epidermoid carcinoma of the cervix as found in the files of the Cancer Clinic of the Medical College of the State of South Carolina, as of December 31, 1950. Since the Cancer Clinic was organized in April, 1948, the majority of cases in this study have been diagnosed and treated since April 1, 1948.

A review of the gynecological charts indicated that there were 219 cases of epidermoid carcinoma of the cervix available for study. A few other cases were excluded from this study because of incomplete data or inadequate follow up. It was of interest to note that epidermoid carcinoma of the cervix was diagnosed twice as frequently as any other malignancy during 1949 and 1950 in the Cancer Clinic.

Race: The incidence according to race is noted in Table 1. In this series, 150, or 68.5%, of the patients were colored and 69, or 31.5%, were white. The ratio of colored to white patients was almost identical with that noted in other studies undertaken in New York² and New Orleans.³ The large percentage of colored patients is perhaps related to the economic status of patients that are seen in the Cancer Clinic.

Age: The average age at the time of the first visit or admission was 49 years. This is slightly less than the average age quoted by Meigs,⁵ but is comparable with ages noted in most reports. The youngest patient was 18 years of age; however, she did not have invasive carcinoma, but had intraepithelial carcinoma of the cervix. The youngest patient with invasive carcinoma of the cervix was 22, and the oldest 76.

Parity: There is no question that women with cancer of the cervix have a higher parity rate than that of the general population.⁵ In this series it was 95.9%, compared with that of the general population, which is 67.9%. There was an average of five pregnancies per patient, with one patient having had 16 pregnancies. Nine, or 4.1%, of the patients had never been pregnant.

Symptoms: There are three chief symptoms of carcinoma of the cervix:⁴ 1. Bleeding. 2. Abnormal vaginal discharge. 3. Pain. The chief symptom is bleeding, and this is usually the first one. It may be slight contact bleeding, following coitus, douching, or

a simple pelvic examination. In this study, bleeding was the presenting symptom in 151 cases, or 68.9%. The next most frequent symptom was pain, which was a presenting symptom in 30 patients, or 13.7%. This confirms statistics quoted by Meigs,⁵ who found pain to be the second most frequent symptom. Twenty-six, or 11.9%, gave an abnormal vaginal discharge as their chief complaint on their first examination. Twelve patients, or 5.5%, had no symptoms related to the reproductive system when first seen in the Cancer Clinic (Table II).

Previous Gynecological Surgery: Supracervical hysterectomy appears to be the most common major surgical procedure to which women developing carcinoma of the cervix have been subjected.⁵ Meigs found carcinoma of the cervical stump occurring in 7.4% of the patients in his series. In the present study, 18 patients, or 8.2%, had carcinoma of the cervical stump. Of the 18 cases, four represented intraepithelial carcinoma, while the remaining 14 had invasive carcinoma of the stump.

Stage: The International Classification of the stages of carcinoma of the uterine cervix was used in this study. The classification was adopted in May, 1950, and places intraepithelial carcinoma in a separate stage, Stage 0. In staging carcinoma of the cervix, if there are any doubts regarding the staging, the lesser of the two stages is recorded. The staging is made on the initial visit of the patient to the Cancer Clinic and should not be changed. There are certain disadvantages to this classification, but at the present time it is the only method that we have for comparison of treatment according to the extent of the disease. In this study, 25, or 12.4%, of the patients had intraepithelial carcinoma and were classified as Stage 0 (Table III). Forty cases, or 22%, had the carcinoma limited to cervix and, therefore, were classified as Stage I. When first seen in the Cancer Clinic, 62 patients, or 33.3%, had extension beyond the cervix; but the carcinoma had not reached the pelvic wall, and tumor-free space could be found between the tumor and the pelvic wall, and they were placed in Stage III. On their first visit to the Cancer Clinic, ten patients, or 5.3%, had Stage IV epidermoid carcinoma of the cervix and were considered terminal. Three cases of the 219 were not staged and were not included in this part of the study.

Histology: Only epidermoid or squamous carcinomas of the cervix were considered in this series. Adenocarcinomas and adenoacanthomas were excluded. There were only 31 patients judged to have Grade I epidermoid carcinoma of the cervix. Four tumors were considered to be quite anaplastic and were classified as Grade IV. The vast majority fell into the

From the Department of Obstetrics and Gynecology and the Cancer Clinic, the Medical College of the State of South Carolina, and the Roper Hospital, Charleston 16, South Carolina.

Grade II and Grade III category (Table IV). It was impossible to make any correlation in this series between the grade of the tumor and the response to x-ray and radium therapy. It must be emphasized that the grading of epidermoid carcinoma of the cervix has nothing to do with the stage of the disease, and we can only say in general terms that the more malignant the lesion, the better response there is to irradiation therapy.

Treatment: At the present time, our treatment of intraepithelial epidermoid carcinoma of the cervix, Stage 0, is in the process of formulation. We have no standard therapy for the non-invasive carcinoma of the cervix in a young female in the child-bearing age; however, we do feel that in a patient beyond the child-bearing age, a total hysterectomy, or after the age of 40, a total hysterectomy and bilateral salpingo-oophorectomy, is the treatment of choice. Once the epidermoid carcinoma has broken through the basement membrane and has become invasive, then more radical therapy is indicated. In a relatively young patient with the lesion limited to the cervix, and no contraindications to radical surgery, such as obesity, hypertension and other conditions that would exclude surgery, then a radical hysterectomy with radical pelvic lymphadenectomy, roughly following the technique of Bonney,¹ is the treatment of choice. This is commonly called the Wertheim procedure, but strictly speaking Wertheim did not include the lymphadenectomy in his description of the operation.

In Stage I cases, in which surgery is contraindicated, and in those with extension of the tumor beyond the cervix, irradiation therapy alone is employed. Roughly, 8000 r in air are administered through four portals, two anterior and two posterior (200 to 250 kv, 15 to 20 MA, 50 cm. target-skin distance and half-value layer of 1 to 1.5 mm. of copper). During the external irradiation, the patient also receives 1000 to 2000 r intravaginally with .25 mm. of copper and 1 mm. of aluminum filtration at 200 kv, and 15 MA with a target-skin distance of 25cm. Since the vast majority of these patients also receive radium therapy, the midline is always shielded with a lead plate to prevent irradiation necrosis. External and vaginal irradiation is followed four to six weeks later by 6000 to 7000 mgm. hours of radium. Twenty-eight hundred milligram hours is delivered through a Swansburg T-tube, with the vertical arm loaded with radium, and the cross bar used as a spacer with filtration of 1 mm. of platinum equivalent. Roughly, 4200 mgm. hours is delivered in the vaults by means of London spheres with 1.4 mm. platinum equivalent filtration. This is more or less our routine x-ray and radium therapy, but it is varied according to the patient; however, we strive for maximum therapy for each patient.

Results: Since the Cancer Clinic of the Medical College of the State of South Carolina has only been in operation since April 1, 1948, it is impossible to compute a five year survival rate. Patients treated prior

to April 1, 1948 were treated in the Tumor Clinic, and only those patients alive at the time of the organization of the Cancer Clinic have their charts available for study at this time. Table V is self-explanatory and includes the number of patients diagnosed each year and whether they are alive or dead as of July 1, 1951. Of 219 patients whose records were available, there were 133 alive on July 1, 1951, and 86 had died. As mentioned previously, statistics for years prior to 1948 give an abnormal picture regarding the five year survival rate.

Summary:

- 1. Epidermoid carcinoma of the cervix was seen twice as frequently in the colored race.
- 2. Vaginal bleeding was the earliest and most frequent presenting symptom, and pain the second most common.
- 3. Epidermoid carcinoma of the cervical stump occurred in 8.2% of the cases studied.
- 4. In the majority of cases x-ray and radium therapy was the treatment of choice.

TABLE I
INCIDENCE BY RACE

Observer	Colored	White
Simpson et al, Charleston	68.5%	31.5%
Di Palma et al, New York	68.3%	31.7%
Graffagnino et al, New Orleans	63.4%	36.6%

TABLE II
PRESENTING SYMPTOMS

Symptoms	Number of Patients	Percentage of Patients
Bleeding	151	68.9%
Pain	30	13.7%
Abnormal Discharge	26	11.9%
No symptoms	12	5.5%
Total	219	100.0%

TABLE III
STAGE OF DISEASE

Stage	Number of Patients	Percentage of Patients
Intraepithelial		
"0"	25	13.4%
I	40	22.0%
II	62	33.3%
III	49	26.0%
IV	10	5.3%
Total	216	100.0%

^aThree cases not staged

TABLE IV
HISTOLOGICAL GRADING

Grade	Number of Patients	Percentage of Patients
I	31	14.1%
II & III	184	84.0%
IV	4	1.9%
Total	219	100.0%

TABLE V
RESULTS AS OF JULY 1, 1951

Year of Diagnosis	Alive	Dead
1950	47	19
1949	40	31
1948	16	25
1947	6	4
1946	7	3
1945	5	1
1944	2	1
1943	3	1
1942	4	1
1941	2	0
1939	1	0
Total	133	86

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THE PRESIDENT'S PAGE

At the annual meeting of the ninth district, the councilor, Dr. D. Lesesne Smith, handed out a short questionnaire, requesting that the members express themselves on five matters. These were: the proposed state grievance committee; the petition of negro doctors to be admitted to membership in the South Carolina Medical Association; the proposed recessed meeting of the House of Delegates, with the intervening afternoon reserved for hearings by reference committees to whom recommendations and resolutions (motions) would be referred, thus lengthening the Association meeting one-half day, and closing it with the banquet on Thursday night; election (or nomination) of councilors by their respective district societies; and finally, any suggestions for the good of the Association.

Fifteen questionnaires were returned, although all the questions were not answered on each one. It is impossible to satisfactorily classify the answers. However, a brief discussion of them may prove interesting.

There was a very definite indication that, although the grievance committee idea was thought well of, these men feel committees should be set up on a county or district basis, with, perhaps, a state committee as an appeal board. Eight replies specified preference for county society committees; five of these would limit them to county societies, three would have a county committee and a state committee. Two expressed themselves as favoring a grievance committee, without other specifications, and four did not answer the question. One man thought the committee personnel should be revolving, so that the "judged might have an opportunity to sit in judgment on the judge." He also suggested that medical ethics are expressed too vaguely and that they should be codified, and that there should be appended to any resolution, setting up a grievance committee, a written bill of rights.

These answers are interesting and they probably indicate that the resolution to provide a grievance committee on a state level, which was carried over from the last meeting of the House and is to be acted upon at the next, will meet with difficulties when it is called up. These answers serve as an indication of the need of consideration of this important matter by a reference committee, before whom any and all members will have the privilege of appearing to express their own ideas.

A grievance committee on a state level would certainly not rule out county or district committees—and I think that the larger societies or the districts should have their own committees. If they did, it would certainly be logical for intracounty or intra-

district grievances to come first before a local committee, and to reach the state committee only if an amicable settlement were not arrived at.

The fact that two men stated, under suggestions, that past-presidents should be removed from the House of Delegates, coupled with similar sentiments expressed by others more widely distributed, suggests that there may be a serious flaw in the pending resolution which would provide that the last five living past-presidents constitute the committee. For personal and other reasons, I object to that provision, and I would much rather see a committee elected by the House of Delegates, from a slate prepared by the councilors (in contradistinction to the Council) and such other nominations which might be made from the floor. I would have the terms of office staggered so that one new man would be added each year. I believe such a plan would have a better chance of passing the House.

Thirteen of the fifteen returning questionnaires commented upon the admission of negro physicians to the State Association. Only one man was categorically opposed to admitting them under any circumstances. Two men did not qualify their approval of admitting them. One man preferred that they should be admitted as a constituent society—rather than, presumably, by admitting them through membership in our county societies. One man suggested that the negroes be allowed to send a representative to the meeting of the House of Delegates to present their petition. Five men would have it definitely understood that negroes would attend no social functions, and three men stated specifically that they should be invited to attend or allowed to attend only the scientific sessions. Whether these men would bar the negroes from representation in the House of Delegates, which is a prerogative of membership, is not clear.

There are only two ways by which negroes can become members of the South Carolina Medical Association. The first is through membership in a county society. The State Association has no authority to order its constituent societies to admit any person or group of persons to their membership. At least two societies are already giving serious consideration to the question of admitting negroes as members. The second way in which negroes might be admitted to membership in the State Association is for them to form a statewide society composed of negro physicians only, with a constitution and by-laws acceptable to the State Association, and for the State Association to recognize that society as a constituent society of the Association. Such a society would be entitled to representation in the House of Delegates on the same basis as other constituent societies.

I feel that there need be no worry about the possibility of social intermingling. State law and customs and our hotel hosts would undoubtedly take care of any difficulty which might arise, which is not likely, and if it did not, all of our social activities could be disassociated from the Association as such, and could be conducted by social or dining clubs formed for that purpose.

The committee of the State Association has discussed both methods of securing State Association membership with a committee from the negro doctors, and it has invited them to elect by which method they would prefer to seek such membership. Their reply has not been received.

Only one objection was voiced to the proposed changes in the program of the State Association. Four made no comment. Ten approve the change.

One man desires no change in the method of electing councilors, one man failed to comment, and one man elected to keep Dr. Smith as their councilor. One man, who undoubtedly was not thinking at the moment, advocated election rather than appointment of the councilors. Of course, they have never been appointed. The other eleven advocated election of the councilors by the district societies or by "democratic process." Dr. Smith explained to me that he suggested that it might be wise for each district to nominate its councilor, rather than having him nominated by any delegate sitting in the House. He interpreted all these replies to his questionnaire except that advocating no change as favoring his suggestion.

There is certainly no objection to such a procedure. Formerly, by custom which has not been uniformly followed in recent years, the councilor has been nominated by a delegate living in his district, and never has there been a second nomination for any

district so far as I can recall. It would not be unconstitutional for any district desiring to do so to select the man of its choice for councilor, and one could almost be totally assured of his election.

Suggestions were offered by five men. Mention has already been made to those who would deprive past-presidents of lifetime membership in the House of Delegates. Others expressed or suggested dissatisfaction with the conduct and policies of the Association. Their attitude should receive serious consideration, although their specific comments are not really constructive. One man said let's elect the president of the Association by secret ballot cast by "doctors of the state and not by recent demonstrated method." Another said: "Let the Council sit as a separate body." Another, "Make the Association the servant of the doctors." Still another thinks there is a "tendency toward ruling and decision and scaling on statewide basis—rather than district and county authorization and ruling." He is a county-righter rather a states-righter and, perhaps, he has something. However, I fail to recall any action of the State Association which has abridged the rights of either the individual or of the county society.

Two recommendations implied criticism of the Board of Medical Examiners for allowing "Grade B men" to practice in the state under any conditions. Although that is not strictly a State Association affair, it is certainly within the rights of any doctor or any citizen, for that matter, to express his opinion concerning it, and if he chooses, to prepare and introduce into the House of Delegates a resolution of censure.

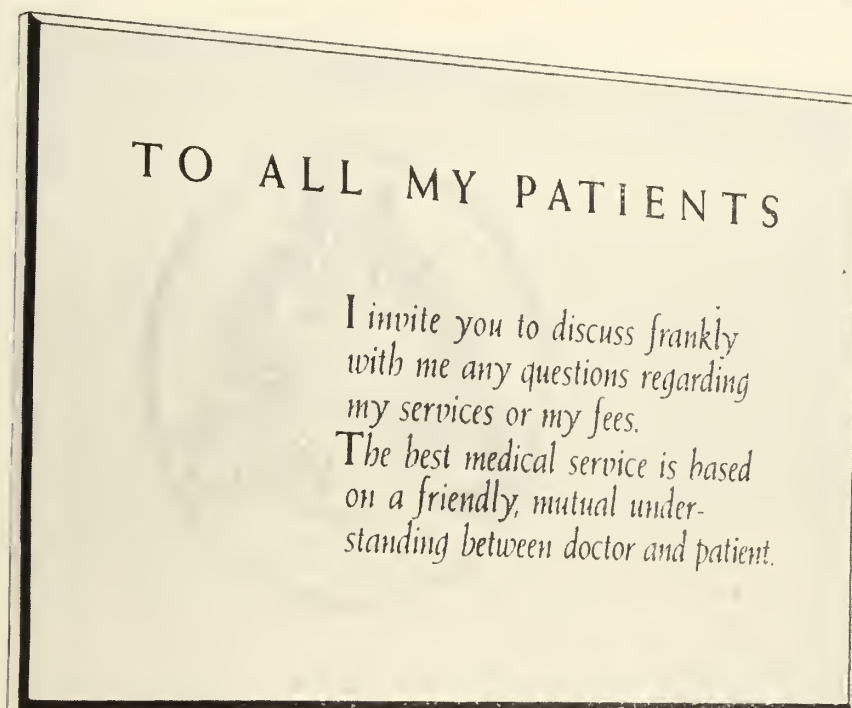
The analysis of the simple little questionnaire prepared by Dr. Smith has been interesting to me. I hope you have found it so.

J. Dechard Guess

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8½ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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DECEMBER, 1951

THE STORY OF THE FIRST CHRISTMAS

And there were in the same country shepherds abiding in the field, keeping watch over their flock by night. And, lo, the angel of the Lord shone round about them; and they were sore afraid. And the angel said unto them, Fear not; for, behold, I bring you good tidings of great joy, which shall be to all people. For unto you is born this day, in the city of David, a Saviour, which is Christ the Lord. And this shall be a sign unto you; Ye shall find the babe wrapped in swaddling clothes, lying in a manger. And suddenly there was with the angel a multitude of heavenly host, praising God, and saying, Glory to God in the highest, and on earth peace, good will toward men.

And it came to pass, as the angels were gone away from them into heaven the shepherds said one to another, Let us now go even unto Bethlehem, and see this thing which has come to pass, which the Lord hath made known unto us. And they came with haste, and found Mary, and Joseph, and the babe lying in a manger. And when they had seen it, they made known abroad the saying which was told them concerning this child. And all they that heard it wondered at those things which were told them by the shepherds. But Mary kept all these things, and pondered them in her heart. And the shepherds returned, glorifying and praising God for all the things that they had heard and seen, as it was told unto them.

Luke 2: 8-20

WELL DONE, DR. WESTON

The Journal wishes to extend sincere thanks to Dr. William Weston of Columbia for a job well done. For fifteen years Dr. Weston has served as a member of the House of Delegates of the American Medical Association, representing the Section on Pediatrics of the A.M.A. He has now relinquished his place to a younger man.

It has been our privilege to see Dr. Weston at his duties in the House of Delegates for a number of years. He was ever faithful in attendance, never

shirked a task to which he was assigned, and gave of his best to the work before him. He gradually came to be recognized as one of the leaders in that body and his judgment was sought by many. He never wavered from his fundamental belief that every doctor had certain inalienable rights, but that he also had certain bounden obligations to others.

The House of Delegates will not seem the same without having "Dr. Billy" down on the front row. But the memory of his work and his devotion to duty will serve as a challenge to those who follow in his steps.

"TO ALL MY PATIENTS"

Misunderstanding is the greatest foe of good public relations. Many a physician has been criticized unjustly and has lost a friend because he and his patient have not had a frank discussion of his services and fees.

At times the problem is difficult to handle. The physician feels that he has rendered a good service and that his fee is entirely justified, and so makes no effort to explain it—and on most occasions such an explanation is not necessary. But there are times when the patient feels that the charge has been excessive and he would like to know the whys and wherefores of the fee, but he is reticent about bringing the matter up for discussion. So he pays his bill, and then goes out to criticize the physician for being a gouger.

In an effort to help out in this situation, the Public Relations Department of the American Medical Association has prepared a simple plaque for hanging in the doctor's office. (A picture of this plaque with information as to how to secure one are to be found on the preceding page). We have purchased one of these and it is now hanging in our waiting room. We would urge all members of the Association to do likewise.

GRIEVANCE COMMITTEE

In his page in this issue, our President, Dr. Guess, discusses the reaction of certain members of one of our county medical societies to the establishment of a Grievance Committee in this state. There is food for thought in what is said.

One of the most important tasks of our House of Delegates, at its annual session, will be that of coming to some decision with regard to a Grievance Committee. Most states have such committees and they appear to be fulfilling a great need in the general field of public relations. We feel that such a committee in South Carolina is needed and that it will prove its worth. But we are also anxious that much thought be given to the composition of the committee and its method of operation. It will be easier to make changes now when it is in the formative stage than it will once the committee comes into being.

We will welcome comments and suggestions and will be glad to devote space in the Journal for full discussion. In this way all of us, particularly the elected delegates, will be in a better position to know just what to do when our annual meeting comes next May.

SHOULD POLITICS BE DISCUSSED?

A question which provoked lively discussion at the recent Conference of Editors, held in Chicago was, "Should national and state politics be discussed in state medical journals?"

Here was the opinion of almost everyone present: A sharp distinction should be drawn between political policies and political parties and candidates. No state journal should enter the political scene by endorsing or disapproving a particular party or candidate. But every journal should feel free, and some said they thought it was its duty, to discuss freely broad policies which were being debated. Federal and state aid to medical education, the care of veterans, proposals for the care of the indigent, the policies of the state board of health—these are but a few of the topics upon which any editor should feel free to express an

opinion. When a particular bill is introduced into the Congress or into the state legislature, the editor should be willing to express the opinion of his Association upon the subject if it is one in which physicians have direct interest. To do otherwise, in the minds of many of those present, would be for him to fail in his function as an editor.

We would be interested in knowing what the members of this Association think in this matter.

EPIDEMIC HEMORRHAGIC FEVER

Recent reports indicate that a rare disease, epidemic hemorrhagic fever, is causing our medical officers in Korea deep concern. Although it was first definitely identified only a few months ago amongst our troops, it has been prevalent in the Japanese soldiers in Manchuria for some time, and the death rate was 30%.

Major General George E. Armstrong, the Surgeon General, has given this general information concerning the disease:

"The specific organism responsible has not been identified, but it is believed to be above a virus and below rickettsiae. It is thought to be transmitted by mites carried by rodents. None of the antibiotics are of any avail, and no vaccine has been developed, although Army doctors are attempting to produce one. Symptoms of the disease are diarrhea and headache, followed by fever, chills, joint pains, nausea and vomiting. Temperatures usually rise to 104, remain there three or four days. By the seventh day, symptoms subside among patients who recover. During its course the disease is characterized by tiny hemorrhages of the sclera of the eye and in the kidneys, heart and anterior pituitary gland, with possibility of hemorrhages in other parts of the body."

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

ASSOCIATION TO SPONSOR ESSAY CONTEST

In cooperation with the Association of American Physicians and Surgeons, the South Carolina Medical Association will conduct an essay contest in the State in the first two months of 1952. Participation was authorized and the necessary amount for prizes and expenses appropriated by Council at a meeting on November 28th. The subject: "Why the Private Practice of Medicine Furnishes this Country with the Finest Medical Care."

The A.A.P.S. has conducted the essay contest on a national scale for the past several years and results have indicated that it can be made, if it has not already become, an important factor in the thought-

training of American youth. Recently we took occasion to refer in this column to the plan for a program of "Thought-Defense" being sponsored at the University of North Carolina. The essay contest is an important element in the plan for thought defense against socialism in this country.

The following contest rules are set by the A.A.P.S. and will apply to the competition here and wherever the contest is conducted:

1. Junior and Senior High School students (7th, 8th, 9th, 10th, 11th and 12th Grades) from all public and parochial schools located in the United States are eligible to enter the Contest—except sons and daughters of physicians.

2. Essays must be limited to 1500 words.
3. Essays should be written on one side of letter size paper (8½ x 11) and if typewritten, double spaced.
4. Contest starts January 1, 1952 and essays must be submitted on or before March 1, 1952 to:

- (a) County or local medical society or auxiliary sponsoring contest; or to
- (b) State society or auxiliary sponsoring Contest (in the event no county or local group sponsors it); or to
- (c) Association of American Physicians and Surgeons, 360 N. Michigan Avenue, Chicago 1, Illinois, in the event no Contest is sponsored by either a county or state society.

5. First three prize winning essays from each county or local medical society must be sent to:

- (a) The state medical society on or before March 15, 1952 (if it is sponsoring a State Contest) to compete for state awards; or
- (b) To Association of American Physicians and Surgeons on or before April 1, 1952, 360 N. Michigan Avenue, Chicago 1, Illinois, to compete for national awards (in the event no state contest is held).

6. First three prize winning essays from each state must be sent to the Association of American Physicians and Surgeons, on or before April 1, 1952, 360 N. Michigan Avenue, Chicago 1, Illinois, to compete for national awards.

7. Compositions must be original and should be well documented.

8. JUDGING: Will be based solely on knowledge and grasp of the subject supported with documentation, and sound, logical conclusions.

9. JUDGES: For county and state Contests and the national Contest: A physician, an educator, and another person, all of whom shall have some special knowledge of the subject.

THE MOST ORDINARY*

There are too many ordinary men in professions. They look away when the conversation turns to literature, science or art.

It is sad when a doctor sees nothing more than technical perfection in a Millet. If he never pauses when a languid morning throws shadows across the harvest field. If he never gazes at lambent northern lights, merged like a million chameleons. Lights that fade like shrouds in evening mists or strike in flashes. If he doesn't want to weep when misty drops touch the pillow in a public ward. Drops that crystallize the tragedy of failure of simple souls. If he doesn't respond to these, he should be in a laboratory searching only for accumulation of knowledge.

*Reprinted from Detroit Medical News, November 19, 1951.

There must be a place for ordinary men. There are so many millions. Aristotle mentioned them. Their place is not in medicine.

James B. McClinton,
 "The Doctors' Own Convention"
 Canad. M. A. J., April, 1951

A LEGISLATOR VIEWS MEDICINE

(Continued from November issue)

European and Asiatic Policies. So, the first great principle in our policy—the policy that we should develop now to avoid the mistakes of the past and to rectify them if possible—is this: Keep as strong as we can militarily, having in mind the limits of our economy. We must also bear in mind that the United States can't do the job alone. We can't do the job alone because we have only a hundred and fifty million people in this country. We also are limited in our resources. In view of that fact, to the extent that we can, we must have allies. What does that mean? It means that both Europe and Asia are important to the United States.

Europe is important for a vital reason. Once Europe falls under Communist domination, the men in the Kremlin will have obtained the skilled manpower and the productive power that they need to change the balance of power in the world to their side. So, it becomes imperative to our security for us to see that this does not happen, by developing a policy with the aid of our allies in Europe—and they, of course, must assume the major responsibility for their defense—which will stop Communist aggression, if we possibly can.

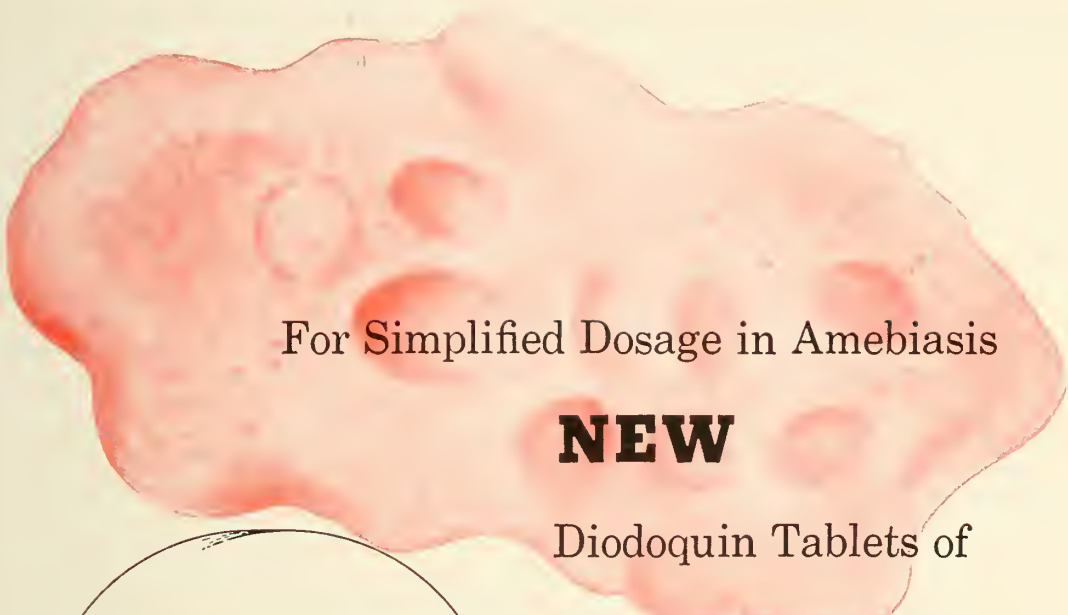
I might say that, as far as our policy is concerned, since World War II it has proved to be relatively successful in Europe, even though you may have disagreed with it at the time those policies were adopted.

We, for example, adopted the Greek-Turkish Loan Program. We adopted the Marshall Plan Program—the Troops for Europe Program—the Arms Aid Program. The result was that Europe was kept from going under Communist domination. The reason for the success of that policy was that the men in our State Department came to the conclusion that the character of the Communist movement in Europe was such that it was dangerous to our security, and I think that conclusion was correct.

Looking over to the other side of the world, what do we find? There we made a basic error. There we adopted an altogether different policy.

This was the way that some of our State Department officials, those whose policies eventually followed, reasoned:

First, that Asia was not as important as Europe. It didn't make much difference whether or not Asia went Communist. Second, and this was a corollary to the first assumption, that as far as Asia was concerned, and particularly, as far as China was concerned, Com-



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SEARLE RESEARCH IN THE SERVICE OF MEDICINE

munism was different. Chinese Communism was something that might develop, they thought, possibly into a variety of Titoism. Chinese Communists were agrarian reformers, some of them said. They were liberals. So it didn't make too much difference whether or not China went Communist. And particularly, they said, that was the ease in view of the fact that the Chinese Nationalist Government was corrupt, weak and unstable.

Let me just parenthetically at this point note the difference in attitude toward the Greek Government at the time we adopted the Greek-Turkish Loan Program.

The Greek Government was one of the most corrupt and one of the weakest and one of the most unstable governments in the history of the world at the time that we embarked upon the Greek-Turkish Loan Program. Why did we do it? Because we recognized that it wasn't a choice between the Greek Government and something worse. So, in addition to granting economic aid, we sent in our military aid mission, and the result was that the Greeks themselves, without the loss of any American soldiers, did the job of putting down the Communist revolution.

The failure of our policy in Asia had two fatal results. The first was that China went Communist. The second result was the Korean War. Some of you may say—that is drawing a conclusion which is not justified by the facts. But I submit that it is, for this reason: The Korean War would never have happened unless China had gone Communist, because the North Koreans would never have dared move South unless they had a friendly government on their northern border. Once China went Communist, the Korean War became virtually inevitable.

So, the results are there—the results of those five years of policy. Six hundred million people went Communist—we became involved in a war in Korea. Now, the question is: Where do we go from here? What kind of a policy militarily — what kind of a policy economically—what kind of a policy ideologically—should the United States of America, Democrats and Republicans, adopt and support during this critical period?

Time won't permit me to go into it any length at all, but I should like to summarize at this point the type of policy that I think eventually the Congress may well adopt—the type of policy that I am sure I would support, and that I think a majority of the American people will support if they understand the problems.

Korean War Must Be Ended. First of all, as far as the war in Korea is concerned, I think we have to recognize that continuance of the war in Korea is not in our interest—that it must be ended. Why? Well, I think General Bradley gave the best argument that I have heard. In opposing the steps that General MacArthur recommended for bringing the war in Korea to a military conclusion, he said that we would be-

come involved in the wrong war, at the wrong time, at the wrong place, against the wrong enemy. The conclusion that I draw is that that is the type of war we are involved in in Korea today, unless we end it with victory in the battlefield. Why? We are fighting a ground war on the continent of Asia. We are fighting the wrong enemy, the Chinese Communists, and we are failing to use those forces in which the United States is superior, our Air Force and our Naval Force, to the maximum extent possible.

So, we must end this war some way. How can we end it? There are three ways that we can end the war. We could get out of Korea. Second, we could end it with a political settlement at the conference table. Or third, we will have to win it on the battlefield. I don't believe we can get out of Korea for the reason that that action would give such encouragement to the Communist movement in Asia that the fall of all Asia to the Communist forces would then eventually become inevitable. And although there are those who claim that Asia is not as important as Europe, I think we should recognize that half the people of the world live in Asia. Sixty percent of the world's resources are in Asia. If Asia falls and Europe remains on our side, we still will become, at some time in the future, though possibly at a later date than if the reverse had been the case, in a war in which the odds would be on the other side.

So, we can't get out of Korea, I submit.

Can we end the war with political appeasement at the conference table? The answer is that we can't because the price is too high. The Chinese Communists insist that we turn over Formosa to them and that we give them a seat in the U. N. If we do that, we would have made inevitable the fall of Asia to the Communists.

So, the third alternative is that we must somehow find ways and means of ending the war with victory on the battlefield. It is quite apparent that we can't win it at the present time, with the limitations that are placed upon our armed forces by the U. N. directive. I am not going to suggest here today what portions, if any, of the MacArthur program should be adopted. I do say that since we should not end the war by getting out of Korea, and since we have exhausted the possibilities of ending it with a political settlement at the conference table, that eventually we are going to have to give our commanders in the field additional authority so that they can bring the war to a military conclusion as quickly as possible. Some of you will say, what about the risk of World War III? The answer is that the continuation of the Korean War itself is as great a threat to the peace of the world as could possibly exist. As long as that war goes on, there is a chance that it may spread. Let me give you an example.

A fire starts burning in a house. What does the Fire Department try to do? Two things. One, they try to keep the fire from spreading and to contain it. That is

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what we are doing in Korea today. But two, they try to put the fire out. Why? Because as long as the fire burns, there is a chance that it will burn the house down. So, it seems to me that the greater threat of World War III is either in a political settlement at the conference table, along the lines that I indicated, or in allowing the present war to continue. Some of you may say, well, what about this war? Isn't it hurting the enemy more than it is hurting us?

The answer is this: Let us admit for the sake of argument that ten Chinese are being killed for every American who is lost. But it is the United States, not Russia, that has lost a hundred and forty thousand casualties in the battlefields of Korea. It is the United States, not Russia, that is losing fifteen hundred casualties every week in Korea. It means that as far as this war is concerned, it is to our interest to end it and to the Russian interest to continue it.

It seems, too, in view of those circumstances, that we in the Congress, and our Joint Chiefs of Staff and our State Department as well, are going to be confronted, for whatever reasons we may now reject the MacArthur proposals, with the eventual necessity for adopting at least some of those proposals so that we can bring this war to a successful military conclusion.

Military Strength Alone Not Sufficient. Now, to hurry on to the other two points which I wish to cover. I mentioned military strength—the necessity for the United States and its allies in Asia and in Europe to remain militarily stronger than the Communist powers. I think that is vital. But I want to emphasize that military strength alone is not enough.

One example to prove the first point that I wish to make. In 1947, when I was in Greece, Congressman Richards of South Carolina, who is the new Chairman of the Foreign Affairs Committee of the House, and I left our party in Athens and went up to the northern part of the country one day to Phlorina, a little town that was completely surrounded at that time with Communist troops. We went there because we had heard that some of the Communist guerillas had given themselves up and were in prison camps, and we wanted to interview them.

I remember particularly our conversation with one of them. He was a peasant lad about eighteen years of age. I asked him how it was that he went into the Communist forces. He told this story. He said, "Six months ago the Communists overran the village. They took me and other youths in the village into the Communist armies. Then they proceeded to indoctrinate us in Communist ideology."

I said, "Well, tell me, what did they tell you you were fighting for?"

He thought a moment and he said, "They told us we were fighting for democracy."

I said, "for Democracy? What did they tell you were the democracies?"

He thought a moment again. He said, "they said the democracies were Russia, Poland, Rumania, Hungary, and Yugoslavia."

I said, "well, now that's interesting. What did they tell you about the United States and Great Britain on that score?"

He thought a long time. Then he said this: "They told us Great Britain, she's finished. And the United States, how long will she last?"

Now, the lesson for us in the words of that simple Greek peasant is this—military strength is important, but we must remember that the men in the Kremlin have said over and over again that they may not have to defeat the United States and the capitalist nations in a war—that they may be able to force us to destroy our economies from within in our efforts to defend ourselves against enemies from without. This is the reason that, in addition to keeping this country militarily strong at this time, it is necessary for us to recognize that we must also keep it economically strong. We must keep the economy strong and sound and productive. That means, as far as Washington is concerned, that at a time when we necessarily must keep our military appropriations high, we must eliminate appropriations for even desirable, but unessential, domestic purposes. We must cut them right down to the bone, because unless we do, we are going to fall directly into the Communist trap. We are going to run the risk of national bankruptcy.

I would suggest to you, as members of the medical profession, that when resolutions come up in your Chambers of Commerce, as they will come up during the time that the House and the Senate are considering the various appropriations bills, supporting this pork barrel project or that one—I would suggest that you might take the lead in opposing such projects, even if they appear to be good for your community, on the ground that the interests of the nation come first at this time. Believe me, it would mean something to the Congress to receive from a Chamber of Commerce a resolution opposing a spending project for a community, on the ground that the national interest came above the community interest.

The American Answer—"Tell the Truth". Now, the last point, and I might say the most important of all and one that fits in with the conclusions that have been drawn by Bishop Wright, and by Mr. Abels in their addresses preceding mine.

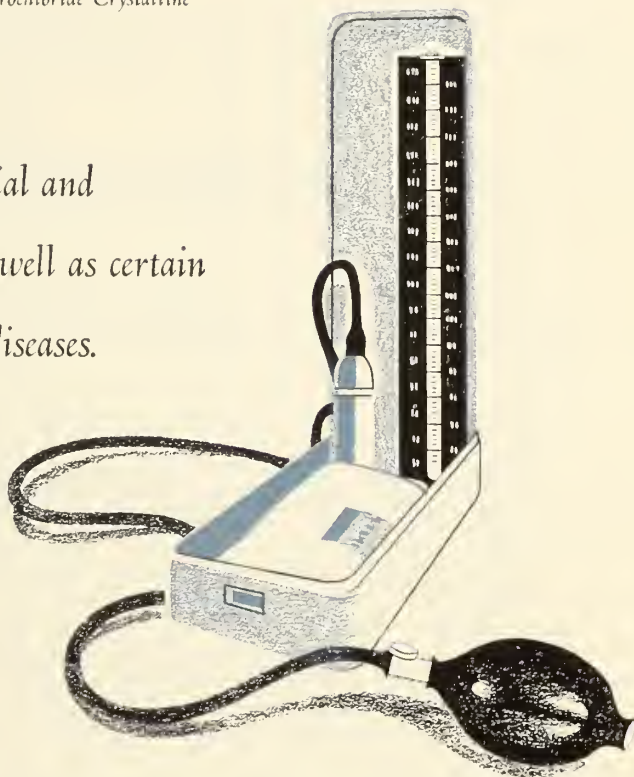
Military strength is important, yes. And economic strength, is also important. Some of you may say—well, if the United States and the free nations can remain militarily stronger than the Communist nations, if we can do that and not destroy our economy from within, that should do the job. Then we will have peace and security in our time.

My answer is that it will not do the job. It may bring peace and security in our time, as Mr. Chamber-

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lain so well put it, but it will not bring peace and security in the time to come. The reason that it will not bring peace and security in the time to come is that we must recognize the essential nature of the conflict in which we find ourselves today.

What is Communism? It is an idea. It is an evil idea, but it is an idea that has a tremendously malignant and potent appeal all over the world, and right here in the United States of America. Never in the history of the world has an idea been destroyed by bullets or defeated by a law. We are not going to have real peace and real security in the world until we begin to win the battle that is going on throughout the world today for the minds and for the hearts and for the souls of men.

You say, "well, aren't we winning it?" The answer is that here where we should be the strongest, we unfortunately are the weakest, because we lose. We lose sometimes abroad and we lost sometimes in the United States.

An example—my last one—to bring that home. What kind of people become Communists? What kind of people become Communists here in the United States? What kind of a man, I have often been asked, was Alger Hiss — Harry Dexter White, the former Assistant Secretary of the Treasury — Lee Pressman, the former General Counsel of the C.I.O. — Nathan Witt, the former Secretary of the National Labor Relations Board — William Remington, who headed up at ten thousand dollars a year the Export Division of the Department of Commerce. They were all involved in Communist activity. What kind of people were they?

Well, I know them all. I have questioned them and I know their backgrounds. First, they were all born right here in the United States of America. Second, they were all graduates, to a man, of the best colleges and universities in this country. And third, they had the best Government jobs, not the little ones, not the ones paying four to five thousand, but jobs paying eight to ten thousand dollars a year, when they were engaging in these activities. And finally, not one of them did what he did for money. He did it because somehow, somewhere, he lost faith in the American system, and he was willing to do anything, engage in espionage, run the risk of disgrace for himself and for his family, in order to impose the Communists system of slavery and totalitarianism upon us and all the free peoples of the world.

I say to this group today, that if we fail so miserably in selling people of this type, from good families, with good backgrounds, on the ideals of justice and freedom and democracy, as we know them, what can we expect abroad? What can we expect in India? What can we

expect in Italy and France and the other critical areas where this battle of ideas is being waged? What is the answer?

The answer is a very simple one, in a way, but it is also very difficult in its execution. That is—to tell the truth. You say, "that is what the Voice of America is for." And it is true that the Voice of America, a government body, must do and can do an effective job in this field. But the Voice of America can't do it alone.

Traditionally, the great accomplishments in this country have not been through individual and co-operative action. That is what we need here, a selling job in which individual Americans recognize that they are the Voice of America.

The three hundred thousand tourists who are going to go to Europe this year—each of them must be an ambassador of good will.

Irving Brown, one of the international representatives of the A.F.L., operating with a budget, which, incidentally, the A.F.L. contributes, of a million dollars a year, has done more in selling the cause of free trade unionism as against Communist activities, including the Voice of America, put together.

And so, that is an indication of the magnitude of the sales job we have. We also have a job here in the United States. That task, and it is the one I leave with you, is by precept and by example, to prove to the people of the world that a free people, working as individuals, working cooperatively, can solve the problems of our society and can solve them more effectively than can a government. I think that if we recognize that challenge—recognize that if we meet that challenge, we will determine not only the future of our professions, but the future of our country, that there can be no question as to the outcome.

Let me say that it has been a privilege to speak to this group. I know that what I have said, particularly in these concluding minutes of my remarks, has not been necessary. The fact that you are here, the fact that you are executives in your organizations, indicates your dedication to public service.

I leave with you this thought and this challenge which we, all of us as Americans, must meet today:

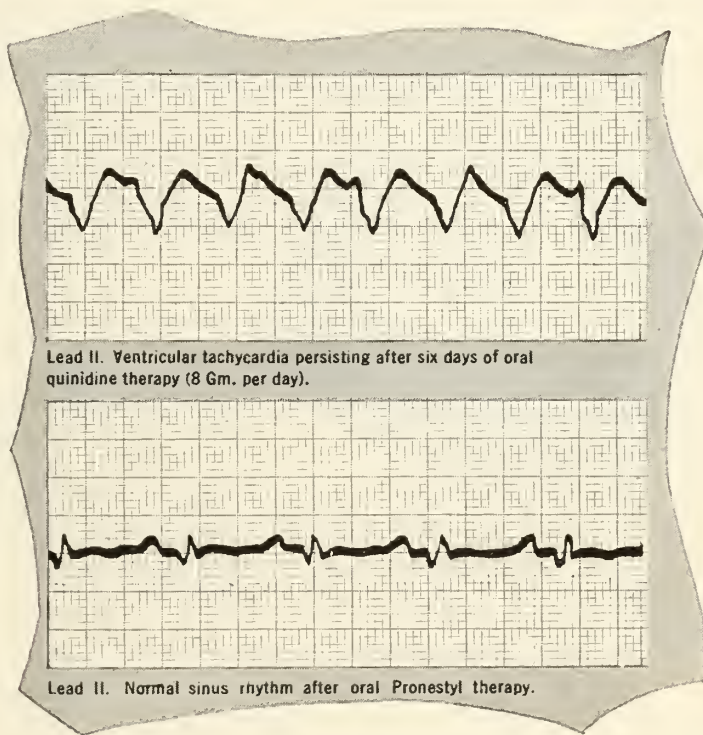
There are great issues which will be decided in Washington, and great issues which will be decided at home. I believe that the way to meet these issues effectively is for each of us to dedicate ourselves to this proposition—that we shall prove to peoples all over the world, by our example here in the United States that the hope of the world today does not lie in turning toward dictatorship of any type, but that it lies in developing a strong, a free, and an intelligent democracy.

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DEATHS

J. CREIGHTON MITCHELL

Dr. J. Creighton Mitchell, 87, dean of Charleston physicians, died at his home on October 25.

A graduate of the Medical College of S. C. (Class 1890), Dr. Mitchell served his internship in the U. S. Maritime Hospital at Staten Island, and in 1893 returned to Charleston. For three years he served as a dispensary physician and then entered private practice. In 1897, he responded to the call for volunteers from the maritime service for physicians who had had yellow fever and spent some time on the cruiser Winona which was engaged in preventing filibusterers from Cuba from bringing yellow fever to this country.

First with horse and buggy and then with an automobile Dr. Mitchell served his patients in Charleston until deafness and old age prevented him from continuing his work, and even then he continued to make an occasional call by bus. During World War I, he served with the Army Medical Corps.

Dr. Mitchell is survived by his widow, the former Miss Louise Bennell, two daughters, one son, and three grandchildren.

WILLIAM B. RYAN

Dr. William B. Ryan, 85, died at his home in Ridgeland on November 6, after a long illness.

Following his graduation from the Medical College of the State of S. C. at the age of 19, (Class of 1887), Dr. Ryan opened his office in Ridgeland where he carried on a general practice for 58 years. First in

his buggy and then in his car he served a large rural community and ministered to the ills of thousands of patients.

Dr. Ryan was also interested in civic affairs and was instrumental in the organization of Jasper county.

Dr. Ryan had the unique distinction of having six sons, five of whom are physicians (four of whom are practicing in South Carolina): Drs. W. B. Ryan, Jr. of Beaufort, Frank W. Ryan of Vista, Cal., C. P. Ryan of Ridgeland, Tom E. Ryan of Spartanburg, and J. O. Ryan of Ridgeland. We do not know whether this record can be matched anywhere in this country.

In addition to his sons, Dr. Ryan is survived by his wife, the former Miss Mary Winkler, and two daughters.

PAUL L. NEVILL

Dr. Paul L. Nevill, 63, died suddenly at his home in Saluda on November 9.

A native of Georgia, Dr. Nevill was graduated from the Atlanta College of Physicians and Surgeons (1914). He had practiced in Aiken a good many years before he moved to Saluda in 1941.

Dr. Neville had gained quite an extensive practice in Saluda and his sudden death was a shock to his many patients and friends in the section.

Besides his wife, the former Miss Edna Kennedy of Register, Georgia, he is survived by a son and a daughter.

WOMAN'S AUXILIARY SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. K. D. Shealy, Columbia, S. C.

Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.

Since the Blood Center opened in December 1950 the Medical Auxiliary has made a real contribution to the success of the Blood program in South Carolina, but there is a definite need for more participation of the medical auxiliary in the volunteer services.

The success of the blood program is dependent on the services of the volunteer and the doctors wife has proved herself adaptable to the demands made on her in the over-all place of its operation.

Members of the medical auxiliary have participated in many and varied activities and have answered emergency calls for help in the center. The service they have given has been a satisfactory experience for them, at the same time has filled a very great local and national need.

Statement concerning Volunteers at the Red Cross Blood center.

92 members signed cards volunteering to help—of this number

35 doctors wives did not serve any hours—leaving

56 Medical Auxiliary members which did help—of these

14 served less than 10 hours

6 served between 10 and 20 hours

12 served between 20 to 30 hours

11 served between 30 to 40 hours

5 served between 40 to 50 hours

1 served between 50 to 60 hours

1 served between 70 to 80 hours

1 served over 100 hours

This report includes work through August, 1951.

The total hours volunteered and served by 56 members was 1645.10 hours. This shows that many were and are interested in our project but we want to request those who signed up, yet did not report for the instruction course or duty to call Mrs. Johnson at 2-8694, or get in touch with Mrs. S. E. Wheeler (5559) who is the Chairman of the Red Cross Blood Bank for the Auxiliary, and offer to help in one of the four branches.

1) Staff Aide

2) Canteen

3) Nurses Aid

4) Motor Corp.

NEWS ITEMS

STATE PERIODICAL NOTICE

The Alabama Section will be host to the Southern Assembly of International College of Surgeons, (Alabama, Tennessee, Louisiana, Mississippi, Florida, Georgia, North Carolina and South Carolina) on February 15 and 16th at the Tutwiler Hotel, Birmingham, Alabama.

A full two days of surgical papers and panels by outstanding experts is assured. All physicians and their wives are cordially invited.

Dr. William H. Bridgers of Columbia has been elected a member of the Neurosurgical Society of America and was installed at the Annual Meeting held in September at Sun Valley, Idaho.

Dr. Lawrence P. Thackston of Orangeburg was one of the guest speakers at the meeting of the Southern Medical Association in Dallas recently.

Dr. Mills Goodlett is moving from Pelzer to Wilkinston and will be associated with Dr. Dwight Smith.

Dr. E. B. Michaux of Dillon was elected first vice president of the Association of Seaboard Air Line Surgeons at the convention held at West Palm Beach in November.

SCHOOL OF CYTOLOGY

The Cancer Cytology Center of the Dade County Cancer Institute, an affiliate of the Medical Research Foundation of Dade County in Miami, Florida, has announced its first one-week seminar for physicians to be held at the Institute from January 14th to 19th inclusive. The lecture courses are scheduled from 9 a.m. to 5 p.m. daily during this period.

Instruction will be under the supervision of Doctor J. Ernest Avre, Director of the Institute and its research staff. More than twenty outstanding local and visiting physicians and scientists will compose the faculty.

This first School of Cytology in Florida anticipates enrollment from local, State and regional areas as well as from the Caribbean.

The general course of instruction in cancer diagnosis and cytology will include lectures, demonstrations and symposia covering the various branches of medicine as related to cancer, including clinical, cytological, surgical and histopathological fields.

Interested physicians should direct their inquiries regarding qualifications, registration, fees and other details to the Director of the Dade County Cancer Institute at 1155 North West 14th Street, Miami, Florida.

Applications for registration, limited to 35 physicians, will be accepted through January 12th.

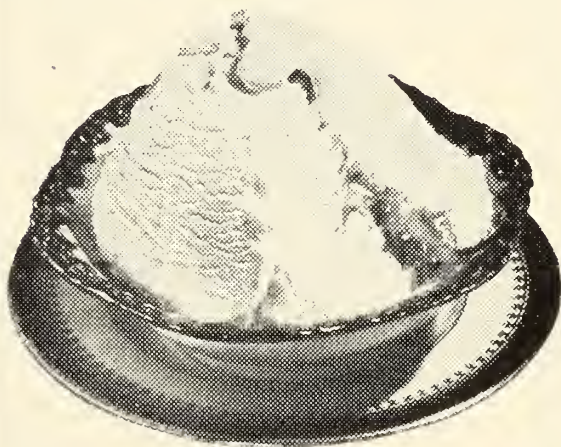
F.A.C.S.

The following surgeons have been accorded fellowship in the American College of Surgeons:

SOUTH CAROLINA

Ralph P. Baker	-----	Newberry
Heyward H. Fouche	-----	Columbia
DeWitt L. Harper	-----	Greenville
Lucius B. Keels	-----	Sumter
John Carroll Scurry	-----	Greenwood
R. Brooks Scurry	-----	Greenwood
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I will appreciate your assistance and will be glad to furnish more definite information to anyone interested.

Thank you very much,
Eugene McMullan
Oakdale Community
Smyrna, Ga.

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Mrs. Claude G. Watson	-----	Business Manager
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William Weston, Jr., M.D.	-----	Columbia

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